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A RECONSTRUCTION LABOR POLICY

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EDITOR: CLYDE L. KING

ASSISTANT EDITOR: C. H. CRENNAN

ASSOCIATE EDITOR: JOSEPH H. WILLITS

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Editor in Charge of this Volume:

C. H. CRENNAN, Ph. D.



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SPAIN: E. DORRAT, 9 Plaza de Santa Ana, Madrid.

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BOOK REVIEWS

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Privileged Comment

THE EDITOR REVIEWS THE ELEMENTS IN A RECONSTRUCTION LABOR POLICY

AFTER July 18, 1918, the tide of war was turning and it seemed entirely proper in October for the editor of a labor volume of *THE ANNALS* to direct attention to those far reaching changes in our industrial life sure to follow a peace not indefinitely remote. No suggestion of pro-Germanism or weakening of morale could from then on attend a discussion of the problems of labor demobilization, labor placement, or labor standards which would affect the lives and productivity of workers in the post-war period. *In time of war prepare for peace* seemed a sensible dictum. Little risk was involved in the decision to focus attention on post-war rather than war labor problems. Events determined and have since justified that decision. Before this volume comes from press, certain parts of a reconstruction labor policy will surely be in effect. Thus does editorial prevision become historical reflection.

By November 1, 1918, it is accurate to say that no definitive and inclusive labor policy had been adopted in the United States for all workers employed in distinctly war industries. In England, reconstruction problems had long been under discussion by writers and special governmental agencies. A far-reaching program had been developed. When this volume appears, perhaps more than in November, the United States may need a comprehensive labor policy.

The real task of the editor proved to lie not in the decision to raise for discussion post-war labor problems, but in the selection of a name for the volume. It came into being under controls far more complex than those comprised in the Mendelian formula. It has grown in spite of adversity.

Whether the United States is facing a reconstruction or readjustment period is a question about which those who speak with authority do not agree. The new industrial creed enunciated by Mr. Rockefeller (p. 167), the labor program urged by Mr. Gompers (p. 182), and the British Labor Party platform (p. 187), show some-

thing of contrast. If an examination of this entire volume is a fair index of the changes ahead—and certainly the greatest effort was made to avoid selection of topics or contributors which would emphasize a single viewpoint—little evidence is found of the desire to cut deep into the institution of private property or make other such fundamental changes as have been urged by British writers.¹ Perhaps Mr. McAdoo was not far wrong in his reported statement that "readjustment" rather than "reconstruction" describes the changes necessary in the post-war period. The word reconstruction, however, has current usage; whether the changes we are facing will become revolutionary is unpredictable.

The use of the expression "a labor policy" in the title of this volume, rather than such a phrase as "labor policies in reconstruction," perhaps indicates an editorial wish instead of the likely trend of events. President Wilson, before leaving the country to give his personal attention to the larger problems of international politics, made the following significant statement:

So far as our domestic affairs are concerned, the problem of our return to peace is a problem of economic and industrial readjustment. That problem is less serious for us than it may turn out to be for the nations which have suffered the disarrangements and the losses of war longer than we.

Our people, moreover, do not want to be coached and led. They know their own business, are quick and resourceful at every readjustment, definite in purpose and self-reliant in action.

Any leading strings we might seek to put them in would speedily become hopelessly tangled because they would pay no attention to them and go their own way.

All that we can do as their legislative and executive servants is to mediate the process of change here, there, and elsewhere, as we may.

I have heard much counsel as to the plans that should be formed and personally conducted to a happy consummation, but from no quarter have I seen any general scheme of "reconstruction" emerge which I thought it likely we could force our spirited business men and self-reliant laborers to accept with due pliancy and obedience.²

That this position has met with approval is shown by such editorials as the one entitled "No Patent Remedies Are Needed to Adjust Labor," from which the following excerpt is taken:

President Wilson seems to see a little more clearly than some other observers, for he told Congress on Monday that the working of natural forces was likely in many cases to bring about readjustment of the country to normal conditions faster than any plans for it could be made in Washington. While he was not speaking particularly of the labor situation,

¹ See for example: J. A. Hobson, "Democracy After the War," S. G. Hobson, "National Guilds" and G. D. H. Cole, "Self-Government in Industry."

² From President Wilson's address to Congress, December 2.

there are known facts sufficient to justify the belief that there is likely to be immeasurably less friction in the reabsorption of the soldiers into industrial life and the employment of the war workers in peaceful industry than the alarmists have anticipated.¹

A difference of opinion over demobilization is clearly indicated by Dr. Walter E. Weyl. "Planless Demobilization" is the title of the article from which the following excerpts are taken:

Here in America we are trusting to luck. We have been lucky before and see no reason why we should not be lucky again. In 1865 our demobilization took place planlessly and painlessly. Of course we are not as young as we were then, not as elastic or resilient, and we are far more industrialized. Still we have an easier task than has England or Italy and in any case there is a special Providence looking after our interests. Even if we wished to demobilize scientifically we should not have the necessary information.

Here is a very incomplete list of some of these things that we do not know:

(1) We do not know how many war workers there are. We do not know whether there are three millions or four millions or five millions or six millions.

(2) We do not know what facilities we have for bringing our overseas army home. We do not know whether we can physically do this job in four months, six months, eight months or twelve months.

(3) We do not know what positions are or will be available for the men who will be discharged.

(4) We do not know how many extra men the railroads can absorb either in operation or in new construction. We do not know whether they can absorb one hundred thousand or two hundred thousand or three or four or five or ten hundred thousand men. We do not know how many extra men can be absorbed by the building trades, by the textile industries, by shipbuilding.

(5) We do not know how many men and women in these and other industries will voluntarily give up their present positions or will be displaced or can be displaced. We do not know how many men and women are employed in these industries. We know nothing about the extent of the dilution of labor.

(6) We do not know anything concerning the immediate future of American industry. We know next to nothing about the home demand for its products. We know still less about the foreign demand. We do not know to what extent the foreign demand for raw products, if it exists, can be financed. We do not know to what extent the recuperation of American industry will be limited by the supply of raw materials, by the reduction of shipping, by the impoverishment of Europe.

To sum up the situation we are running new risks simply because we have not studied the problem or realized that there was a problem. We are like the statesman who believed that an army could be created over night by a million men springing to arms. He thought of mobilization as an adventitious gathering of a million freemen, each with his fowling piece. We are still thinking of demobilization in loose terms. But demobilization is a highly technical process; military demobilization means industrial mobilization. It is

¹ Since this editorial the same paper has been featuring stories of the inability of a few discharged soldiers to find employment in this same community where natural forces would bring readjustment to normal conditions faster than any plans could be made in Washington.

primarily a civil or industrial, not a military task; it is a scientific task, requiring order, discipline and synchronization, and above all, forethought.⁴

If the tenor of the papers in this volume is again significant, it would seem that the editorial wish for a reconstruction labor policy is shared in rather generally by the contributors—men who have viewed our reconstruction labor problems from the closer range of personal experience.

During the war it is safe to say that we modified the concept of individual pecuniary gain and the idea that money would buy goods somehow, somewhere. We realized, perhaps imperfectly, that the war had to be financed from the current national income. We were interested in determining "on what the productivity of the productive factors depends." We divided the less essential from the more essential businesses for regulatory purposes. The slogans, "business as usual," and "buy a bond and pass it on," were discarded, along with our reliance upon the slow-going adjustments under an unregulated law of supply and demand. All this and much more occurred under war pressure. "We thought and acted as a nation instead of a million sightless autonomous units."

The "post-war mind" must, of course, be considered in reckoning on the probability of establishing a comprehensive national labor policy. Human instincts involved in man's behavior are stimulated very differently by peace and war conditions. "A reconstruction labor policy" will cause less of a thrill than did marching troops or "win the war." Especially is this so when most of us have acquired the habit of individualistic activity; we "do not want to be coached and led." However, with mobilization of our industrial life a national achievement, it does seem that the release of man power for post-war industry and the placement of labor, if not the standards for replaced labor, offer a problem truly national, requiring more than readjustments under the old opposition of interests partly repressed by the calling forth of a war feeling. It does seem that far-reaching national prevision and provision are required, and that there should be at least the fullest utilization of existing machinery to avoid a period when men *may* "hunger, worry, suffer, go to pieces." It does seem that national readjustments should not be left mainly to

⁴ *The New Republic*, November 30, 1918. Pp. 125-127.

individual or group interest,—or disinterest. The wish for a comprehensive reconstruction policy regarding labor takes on all the fervor of a political prayer.

Assuming no overthrow of the institution of private property, or other such fundamental changes as have been suggested in certain quarters,—assuming that a readjustment rather than a reconstruction labor policy is the problem we are facing, we can group the elements of such a policy under three main heads, corresponding roughly with the order in which our labor problems will arise. Man and woman power will be released from war activities for post-war industry. The problem of the transition period then becomes that of labor placement and labor assimilation. Labor standards for replaced labor constitute a third and continuing group of questions far more important than the passing changes accompanying a return to peace conditions in industry. The papers in this volume are arranged in the order just indicated. But before reviewing the elements in a reconstruction labor policy it may not be amiss to note one point,—elaborate machinery, such as England boasts of, may not be an indispensable part of the formulation or execution of a national labor policy. "Made in America" is likely to evoke a more favorable response, although the British plans may suggest methods for us which should not be passed over thoughtlessly.

In some quarters it was feared that the demobilization of our troops might be carried on in some mathematical, mechanical way which regarded the convenience of the army rather than the needs of industry, the occupational qualification of the soldier, geographic diffusion, or domestic obligations. The first paper of this volume (p. 1) contains a discussion of army demobilization which should come to some better end than a pigeon-hole in a War Department desk.

Release of man power for post-war industry calls to mind not only the mustering out of soldiers but the release of industrial leaders from government service (p. 13). This process carries with it an interest commensurate with the conspicuous position held by these men and the possibility of their great influence when they return to their peace occupations. That the release of industrial leaders is significant for business and labor adjustments is a manifest proposition, but will they go back to business pur-

suits with a new national viewpoint regarding production and a desire to coöperate in establishing such interrelationship of government and business as is necessary for the public weal under even a peace régime?

Even though "we know nothing about the extent of the dilution of labor," it would be most helpful for the formulation of a reconstruction labor policy to have a clear cut statement as to the position of both labor unions and employers regarding the retention of unskilled workers substituted for skilled labor, women drawn into men's work, and children recruited for industry under war pressure and a favorable decision of the Supreme Court. Repeated efforts were made to ascertain the attitude of responsible labor union officials and employers regarding possible displacement of women, unskilled workers and children who were drawn into the industrial ranks as a war measure. Such information would make surer any steps necessary to prevent a serious condition of maladjustment both in the release of man power for post-war industry and industrial placement.

It would be helpful also—if a comprehensive government policy were likely to be formulated regarding post-war readjustments in industry—to have clearly set forth the policies of government corporations in releasing labor. The government cannot fairly expect norms radically different from those it adopts in the case of its own employes to be acted upon generally by business men in the conduct of their private enterprises. Formal statements were not available.

Industrial placement suggests a query regarding existing agencies to connect the man and the job. The organization of the United States Employment Service and its war achievements are indicated in the first paper in part two of this volume (p. 19). In spite of limitations and shortcomings incident to rapid growth, and in spite of current criticisms, we may still give ear to the plans already developed for the greater usefulness of the service during the post-war period. The service is national in its scope; the immediate problem of industrial placement is national in extent; we may reasonably expect effective adjustment of the United States Employment Service to this sudden problem of placing demobilized man power.

The lessons of the war in shifting labor from place to place or

occupation to occupation should have a very real significance in working out the problem of industrial placement during the post-war period. Mistakes made in gathering together large groups of men in one locality without due regard for housing and local transportation facilities, mistakes made in recruiting workers without assembling materials needed, stand out in the memory of those of us living in the war industries sections of the Atlantic seaboard. Shifting workers from one end of the country to the other only to be sent back the next week was not conducive to labor efficiency. Recruiting labor as if a commodity—no questions asked so long as five to ten men appeared for each job at a given time and place—but aggravated both labor shortage and labor unrest. These and other mistakes of shifting labor are still fresh in our minds. Now that we are facing the problem of demobilizing the army and war industries—a problem of industrial mobilization which includes inevitable shifts of labor—we are entitled to competent counsel. It is the opinion of the Director General of the United States Employment Service (p. 28), that oldtime methods of recruiting labor by private employment agents, under methods which regard labor as a mere commodity, will unquestionably aggravate conditions of unemployment. While labor should not be put in leading strings, we may have full regard for the opinion that “mouth to mouth” information regarding labor requirements in various regions and industries will be inadequate and misleading, contributing in large degree to the already serious problem of floating labor. The attitude that the individual, unaided, is competent to find and choose his own job will often result in unemployment and misery. It seems reasonable, also, that commercial agencies and state employment organizations, unaided, are as likely to prove inadequate in shifting and placing labor during the post-war period as they were alleged to be under pressure of war necessity. The need for coördinated activity of all possible agencies the country over is a real need if the war has any lessons for us regarding the shifting and placement of labor. An adequate and effective national clearance service, based on community surveys of labor requirements and the coördinated activity of existing employment agencies, may not have a paternalistic compulsory feature, but it should go far toward preventing improper labor distribution, excessive turnover, floating labor,

unemployment, unrest, misery. Recruiting, shifting, clearing labor, no matter how extensive the machinery for labor placement, will result in maladjustment, however, unless one error is guarded against, that of recruiting men unfitted for the work they wish to do. Here lies the importance of trade tests and a uniform classification of jobs already available for the use of labor-placing agencies.

The use of army tests in rating general intelligence and trade skill (p. 38) has been one of the notable innovations of the war. Reliance on these tests in the army for bringing man and job together and equalizing units for development purposes, suggests the possibility of the extension of psychologic tests for the scientific placement of labor in post-war industry. The selection of men for particular jobs could very easily be made more effective if one basis for selection generally adopted in industry were a rating on general intelligence and technical skill. Moreover the shifting of employes from department to department, the picking of individuals for further training, and the reduction of costly labor turnover are among the possibilities suggested by Dr. Ruml, who has first hand experience with the operation of army selective tests. His warnings regarding their use by employment managers are not the least important part of his contribution. Some psychologists, to be sure, are still doubtful regarding the efficacy of group tests as compared with individual tests. The devising of satisfactory psychological tests for many purposes is still in the experimental stage. The development of this work, however, gives promise of a large increase in the effectiveness of employes, if indeed it does not mark the beginning of a new period in vocational and educational guidance. No reconstruction labor policy will be well considered if it does not include the extension of selective tests to labor placement in peace time.

That war pressure has given emphasis to personnel problems in industry (p. 47) requires no extended demonstration. Broad gauged organization and supervision of labor alone will prevent labor adjustments from becoming the very storm center of a possible clash between radicals and reactionaries. Employers have chafed under wage increases accompanied by no marked increase in labor efficiency. Certain limited groups of employes, especially in war industries, may have secured a surplus over

and above a basic living standard through a monopoly power conferred by their ability to do damage to industry,—if only through withholding their labor unless demands were met. Cost plus contracts did tend to retard wage increases which were not necessarily connected with productive efficiency. Employers, smarting under increased wages unaccompanied by increases in production, are not likely to make labor readjustments easy if they adhere to an "obstructive philosophy." Those labor leaders who adhere to a "destructive philosophy" likewise can prevent the readjustments necessary in the coming days. Upon personnel departments or employment managers will devolve in no small measure the work of placing men in industry and avoiding labor disturbances over wages and labor standards.

One of the parts of a reconstruction labor policy that is receiving more than ordinary attention at this time is the establishment of buffer employment during the reconstruction period. Mr. Mallory, who has long been working on this problem of buffer employment, has set forth his project (p. 56), to utilize public works in the stabilizing of employment. He occupies, moreover, a position which gives him opportunity to demonstrate more fully the importance of this part of a reconstruction labor policy.

Placing soldiers in farm colonies (p. 62) is a plan which has received not only the attention of the Secretary of the Interior, but has been accorded full comment in the President's last message to Congress. Just what that plan is will be far more intelligible after reading the exposition of it in this volume by its sponsor.

One hesitates to take the rôle of critic when he finds that parts of a reconstruction labor policy are actually in process of development and execution. The placement of soldiers mustered from army service may very well be expedited through the use of public works for buffer employment and the development of farm colony projects. The placement of war workers in general may be greatly furthered through the activity of the United States Employment Service.

Housing and local transportation facilities in relation to labor placement aroused more than usual interest during the war. A long time view of this same problem (p. 51) really raises for consideration one of the labor standards discussed in the third section of this volume.

The problem of industrial placement is sure to be affected by whatever immigration standards we may adopt for the post-war period. However "liberal" one may be, or however "internationally minded," he is likely to be conscious of conservative feeling and national sentiment in considering the possible effect of immigration upon an American standard of living. Labor placement in this country may not be complicated by the "dumping" of crippled and unfit workers; a problem, however, exists in maintaining immigration standards for able-bodied workers. But it is unnecessary here to redevelop the thesis set forth (p. 73) in the article on "Immigration Standards after the War."

"Seven Points for a Reconstruction Labor Policy" (p. 80) is the title the editor made free to prefix to an article summing up the views of a writer whose first-hand experience with the problems of labor standards during the war give him ground for indicating certain fundamental propositions regarding standards for replaced labor.

With the influx of women into industry, one aspect of a reconstruction labor policy most certainly has to do with labor standards for women. The classic report of the British Health of Munition Workers' Committee included a noteworthy section treating of conditions under which women should work. The standards set up by the Woman in Industry Service of the United States Department of Labor (p. 87) are deserving of equally close study for the determination of a federal labor policy during our post-war period. With one-fourth of the workers of the United States women, a "condition and not a theory confronts us." It may shock us to realize that the economic function of women as controllers of consumption is now but part of the story; women have come into our man-made industry as co-workers if not competitors. Changes in economic doctrines and business organization are the inevitable concomitants of that fact. Full hearing is needed for the woman's point of view when she is sure to play a doubly important part in our economic life.

The short run problem of women in industry is that of "diluted labor." A view urged by a writer whose position alone would give her hearing is that "the right of the returned soldier to his job is not a labor policy upon which to build a program for women in industry." She contends that the reconstruction needs of in-

dustry will require the utilization of all available man and woman power. What view will obtain with employers and labor unions regarding diluted labor is, however, not yet clear and the immediate problem merges in the long run question regarding the jobs which should be reserved exclusively for women workers. A clear cut program regarding woman's work in industry would go far toward making diluted labor adjustments easier.

One point is fairly clear, however, about diluted labor. Those who assumed that women factory employes will shift *en masse* to domestic service, are overlooking some human instincts that have been stimulated by war conditions. The long hours, isolation, and self abasement attached to domestic employment will have small appeal compared with freedom after a standard workday, group feeling in the factory and the fuller play of the self-assertive tendency in human nature which has been made possible by industrial employment. Psychic income may be received directly from employment as well as indirectly through goods purchased with even high money wages from domestic service. A considerable number of housewives will have a continuing interest in electric washers and vacuum cleaners. And what applies to domestic service may apply in some degree to a giving over of industrial employment to return precipitately to the former occupation of matrimony. The detached observer may count on the age-long sex instinct, but it will be surprising indeed if some curious compromises are not effected.

Women are in industry in larger numbers than ever before—many of them to stay, at least long enough each generation to constitute a problem. To the old three-fold division of labor—geographic, occupational, and division of tasks within an occupation—it has been suggested that a fourth be added,—sex division of labor. Advocates of such specialization assure us that this new division of labor will not be based on the formulae "woman's place is in the home" and the "inherent difference of woman's mind"; whether women should do the same work as men is a question predicated on physiologic differences. Women have been doing an undreamed-of number of men's jobs, with perhaps slight modification of machinery and working conditions. This new work was undertaken because of war pressure, and it is perhaps doubtful whether it has been carried on long enough even

by the women of England to determine the long run physiologic effects. The close connection between woman's physical make-up and the nature of her work was so clear that proper safeguards were devised for her employment in many instances, if indeed she was not altogether excluded from particular jobs. It has been urged that perhaps a sex division of labor should be worked out which would throw open to women in general the light, replaceable jobs. This theory assumes that women should not undertake work beyond their physical strength, nor should they usually be looked upon as a first source of labor when the work desired would require the uninterrupted activity of a highly trained and specialized worker. In 1910, 6,150,569 women gainfully employed in the United States were between sixteen and forty-four—child-bearing years. Under such division of labor, women would be co-workers with rather than competitors of men. The general adoption of such a policy would bring about a new set of non-competing labor groups, and after a time it would be as unpopular for the much talked-of "he man" to run elevators, sell ribbons, or occupy one of the light replaceable jobs as to carry knitting implements in a street car. Such a change, of course, is dependent upon the development of public opinion rather than the establishing of elaborate government machinery. Men would have their own bailiwick; they would do the heavy work in industry and hold those positions of the less replaceable kind.

The sex division of labor here sketched is of course likely to be accorded first place in an unpopular review, especially by those women who certainly have the training and qualities for executive work, and who look forward to a career without the field of matrimony.

That there are physiologic differences between men and women sufficient to warrant the non-entrance of the latter into particular occupations is an undisputed fact. No group more keenly appreciates this fact than do women themselves nor does any other group place a higher premium upon the health of women as the greatest factor in the efficiency of the industrial worker and in the development of the home-maker and mother of the future. But such physiologic differences afford no justification for a sex division of labor which may be advanced as one of the methods of labor adjustment in the post-war period. By eliminating women as the competitors of men, even in a restricted group of occupations—in a word, by "manizing" some occupations and "womanizing" others, a blow is struck at the industrial morale of American womanhood. Regardless of the sincerity of motive which may underlie such a theory, it is bound inevitably to mean a destruction of the initiative of that group of women, admittedly the minority group, whose training and qualities are such as to make them as executives the peers of men. And there will be an effect,

equally pernicious, on the majority group of industrial workers by the stimulation of their desires and judgments. Admitting that sufficient physiologic differences do exist to warrant the exclusion of women from particular occupations, let us face likewise the fact that the physical incapacities of some men warrant also their exclusion from particular jobs. And with this as a premise let us add to the trade and intelligence tests, now an accepted prerequisite in many occupations, physical tests which will eliminate those men and those women from enrollment in the occupations for which they, for any reason, are not fitted. By this method we are putting employment upon the only basis where it should rest—a basis of physical and mental fitness for a particular job without regard to sex.

The causes of labor unrest (pp. 95 and 101) that appeared during the war, were accentuated aspects of continuing sources of labor disturbance. In determining standards for replaced labor, full thought must be given not so much to palliatives as to the elimination of deep-rooted maladies in our industrial society. "Can We Eliminate Labor Unrest" is the title of the article setting forth in concrete form standards which make clearer an affirmative answer. Where the focal points of labor unrest are likely to be found is emphasized in the paper on "Post-war Causes for Labor Unrest." Knowing the probable causes of conflict, it will be easier to formulate a reconstruction labor policy which will look to the avoidance of those outstanding causes of labor unrest.

So acute a cause of labor unrest is the inevitable problem of wages that separate treatment has been accorded it. As a war problem the importance of determining an American standard of living has been forced on our attention by the upheaval in prices and the necessity of adjusting money wages to increased living costs. Not only has the Labor Party of Britain gone on record as favoring a basic living standard for the nation, but our National War Labor Board has determined wage disputes on the principle that all workers are entitled to a standard "which will insure the subsistence of the worker and his family in health and reasonable comfort." Clear expression has been given to the doctrine that there is a standard of living necessary to the productive efficiency of wage workers. Wages of various groups over and above this basic standard may constitute a surplus traceable to strategic advantage or monopoly power. The surplus may or may not contribute to increased efficiency of labor, but theories of wages seem lately to have been modified to fix a minimum below which the worker cannot be expected to give effective service. In reckoning that part of the national income which could be devoted to

war purposes, students of public finance placed as a necessary limitation on war expenditures the setting aside of a sufficient fund to maintain the energy of the people. A human maintenance fund and a capital replacement fund are indispensable requisites of efficient *post-war production*.

Just how a standard of living connected with productive efficiency could be determined was sometimes considered a matter of mystery beyond the comprehension of all but economists. That delusion must certainly give way before the treatment of budgetary studies in the article entitled "Measurement of the Cost of Living and Wages" (p. 110). It is a bit of privileged comment for the editor to state that Professor W. J. Ogburn has stripped of its mystery the science of budget construction. It is of more importance for most of us to have some clear cut idea of the method of measuring the cost of living and the actual increases in American living costs, than to follow an involved discussion of perhaps minor points of budget study. It is, however, but another bit of privileged comment to raise a question regarding the regular assumption of a family of five which may not always square with the facts. Thus in one state the average family may be 4.7 or in one large labor group 3.86. Budgets are constructed to make adequate provision for a family of five in order that families of subnormal size may find it possible to increase to the normal limit without suffering a lowering of their customary living standard. This practice is justified on the ground of public policy. It is a matter open to argument at least whether increased family earnings necessarily insure family increase. The size of the family seems more often to vary inversely with the size of income, and an improved standard of living "does not come to fruition in a greater number of children." As a matter of scientific procedure in budget construction, in no way impugning the desirability of a normal family of five, the question may still be raised whether the old assumption will necessarily yield the desired result.

In connection with the study of wages in relation to living costs, it is noteworthy that there should be in this volume several positive clear cut statements that the wages of the chief bread winner should be adequate to afford a living standard for the entire family of five. In various studies the chief bread winner's earnings

(husband) have constituted 46 per cent to 89 per cent of the total income of the family. It is urged, however, that earnings contributed by other members of the family group should not be reckoned as "complementary earnings" in the determination of wage scales.

One of the points of particular interest to economists in Professor Ogburn's paper is the outlining of pioneer work to express a budget in quantities rather than only in prices. The advantages of having a unit basis for a living standard are clear, when one considers price variation from place to place and time to time. Such a quantity budget will have importance for the establishing of a basic efficiency wage almost irrespective of particular times and particular places.

Equal pay for equal work is the basis urged for the determination of wages for women workers (p. 123) and certainly in one instance brought to the editor's attention the formula was more than justified. Three conductorettes and three conductors had alternate cars on the same street railway line the same day. The office returns showed that the day envelopes of the women contained something like twice the fares turned in by the men. Generalization, however, as to woman's initiative or efficiency would scarcely be warranted on the basis of this single test.

Without being disposed to question the suggestion of equal work—equal pay, one can still raise the query whether the problem of wages under a sex division of labor would not be equally simple. If instead of conflict between men and women for the same jobs and pressure for acceptance of the doctrine equal work—equal pay, sex division of labor were established, it would but set up additional non-competing groups, and wages for women as for men would be determined on the basis of a living standard with any surplus secured through collective bargaining or strategic position.

Health standards for labor (p. 130) are clearly comprehended in a reconstruction labor policy. Fatigue, hours of work, housing, working conditions are subjects inseparably related to productive efficiency and human welfare, as are hazards of women's work and the problem of the child in industry. One suggestion made in the paper entitled "Health Standards for Labor" is deserving of more than editorial discussion. If part of the task of connecting the man and the job may involve trade and intelligence tests, another

surely requires physical tests for the fitness of workers. It is not enough that women should not be permitted to engage in work beyond their strength—it is definitely necessary that men should not be enrolled in occupations for which they have not the physical capacity. The establishment of the practice of subjecting candidates for work to a physical examination would undoubtedly meet with opposition, but, should public opinion crystallize regarding that standard for the post-war labor force, proper legislation and, indeed, administrative machinery could speedily be devised. It would perhaps work a hardship in the case of adults to have such a plan develop as part of a reconstruction labor policy, but the situation would be less complex in the case of youths entering occupations which might be detrimental to health and development. Health standards for labor include not merely the reducing of hazards to a minimum and increasing the productive capacity of the individual,—they may even be made a basis for vocational guidance and the encouragement of young men to start in work for which “he-men” are qualified.

Vocational guidance leads directly to the consideration of industrial training after the war (p.137). The use of the United States Training Service to fill labor prescriptions on the basis of skill acquired during the war, has given new emphasis to participation by the federal government in the work of industrial education. While one may quarrel with the implications of “specific productivity” in the idea that the maintenance of wages is “dependent on the relative production of the individual worker,” or the maintenance of the national average output, he can nevertheless endorse the opinion that industrial education over and above special training by industrial concerns is truly a national need. The rôle of the employment manager in vocational guidance must not, however, be overlooked (p. 144).

In closing his comment the editor may be permitted to note that the War Emergency and Reconstruction Congress of the United States Chamber of Commerce, recently in session at Atlantic City, was a gathering of national interest (p. 148). The attitude of business men towards post-war standards for industrial relations (p.163) will count heavily in the determination of a reconstruction labor policy and the setting of labor standards during the reconstruction period. That the old order of tooth

and claw struggle between organized business and organized labor cannot result in the future political and social stability of the nation, or, indeed, the industrial prosperity of this great country, was clearly recognized by one of the outstanding speakers at the business man's congress (p. 157). By their acts will they truly speak!

It is the editor's special privilege to make grateful acknowledgment to Mr. V. Everit Macy, Dr. Royal Meeker, and Mr. Paul T. Beisser for their good offices in helping to suggest topics and contributors for a labor volume. More than editorial courtesy was shown by Mr. Thorpe, editor of the "Nation's Business," and Mr. Kellog, editor of the "Survey," in permitting the publication of certain of the papers of this volume. Above all acknowledgment is due to those busy men and women who made personal sacrifice of time and effort to prepare papers developing "A Reconstruction Labor Policy."

C. H. CRENNAN.

Who's Who of Contributors

ANDERSON, MARY. Worked in the shoe factories for about 18 years. Belonged to Local No. 94 of Chicago of the Boot and Shoe Workers Union during that time. Was its Pres. for many years. Organizer for the Nat. Women's Trade Union League for eight years, a member Nat. Executive Board of the Boot and Shoe Workers Union 12 years. Member of Committee on Labor, Advisory Commission, the Council of Defense. One of the advisors in the Woman's Branch in the Ordnance Dept. when Miss Van Kleeck was dir. Appointed since then by the Sec'y of Labor to the position of Ass't Dir. in the Woman in Industry Service. Dep't of Labor.

BRÜERE, ROBERT W. Dir. of the Bur. of Industrial Research. Regular contributor on industrial subjects to the editorial columns of the *New Republic*.

CLAYTON, C. T. Clerk to the Committee on Labor of the House of Representatives during the Sixty-third and Sixty-fourth Congresses. Since then has been in the Dep't of Labor, first in the Sec'y's Office, latterly successively Ass't Dir. Gen. of the Employment Service, Dir. Civilian Insignia Service and now Dir. Training and Dilution Service, which is known as the U. S. Training Service. Recent publications have been on both "Employment Questions" in the publications of the American Assoc. for the Labor Legislation, and on "Employment Management" published by the Bur. of Labor Statistics of the Dep't of Labor.

CLOTHIER, ROBERT C. Lieut.-Col., U. S. A. Several years ago succeeded E. M. Hopkins, now Pres. of Dartmouth Coll., as Employment Mgr. with the Curtis Publishing Co., Phila. Subsequently resigned to become Ass't to the Vice-Pres. of the A. M. Collins Mfg. Co. but shortly afterward left to come to Washington to become a member of the Committee on Classification of Personnel in the Army, created by the Sec'y of War in August, 1917, to insure proper analysis, classification and placement of the soldiers in the American Army. Still a member of that group, although the committee has formally been merged with the Personnel Branch of the Gen. Staff.

DENSMORE, JOHN B., LL.B. Ind. Law Coll., 1909. Electrician, Bell Telephone Co., various stas. in Ia., to 1902; with Mine Worker's Journal, Indianapolis 1904-9; practiced law, Polson, Mont. 1909-13; first judge Municipal Court, Polson, and brought about commn. form of govt. there; solicitor Dep't of Labor, June 2, 1913-Jan., 1918. Nat. Dir. of employment, since Jan., 1918.

FAIRCHILD, H. P. For eight years ending June 30, 1918, was on Faculty of Yale Univ. The last year was also Sec'y of the Yale Bur. of Appointments, and part of the time Sup't of the New Haven branch of the U. S. Employment Service. Now Ass't Dir. Personnel Dep't of the Nat. Headquarters of War Camp Community Service. *Author:* Three books, "Immigration," "Greek Immigration to the United States," and "Outline of Applied Sociology." Has written numerous articles for periodicals.

GOMPERS, SAMUEL. Pres. American Federation of Labor. Cigarmaker by trade. Has been advocate of the rights of labor, and connected with the efforts to organize the working people since his 15th year. One of the founders of the American Federation of Labor and editor of its official mag. Has written a number of pamphlets on the labor question and the labor movement; with an intermission of one year has been Pres. A. F. of L. since 1882; first Vice-Pres. Nat. Civic Federation, mem. Advisory Commn. of Council of Nat. Defence, 1917. *Author:* Labor in Europe and America.

HILDEN, JOHN. Cornell '09. Year with *N. Y. Evening Sun*. Year in Europe to study social and economic conditions. Editor *New Internat. Encyclopaedia*; 1903, editorial writer on *Evening Press*, Grand Rapids, Michigan. Sec'y Municipal Affairs Committee Field Sec'y Nat. Housing Assoc. until January, 1916. Following year was Sec'y of the Ellen Wilson Homes, Inc., of Washington, D. C. Sec'y of the Immigrant Housing Com. of the Nat. Americanization Com. and Sec'y of the Housing Com. of the Baltimore Federated Charities later. Jan., 1917, Sec'y of the Phila. Housing Assoc.; Jan., 1918, mgr. of the Child Federation also. During 1918 Phila. representative of the U. S. Housing Corp'n. Member Nat. City Planning Ins., contributing editor *Survey*, and member of the Editorial Bd. of the *National Municipal Review*.

JONES, MARK M. In gen. offices of the W. C. F. and N. Ry., Waterloo, Iowa. Became traffic mgr. of the Wm. Galloway Co., Ass't Gen. Mgr. there. In Gen. Freight Dep't of the Southern Pacific Co. in California. Industrial Sec'y of the Oakland Chamber of Commerce. Became sec'y, moved to N. J. and organized Personnel Dep't of the Thomas A. Edison Industries. Actively engaged in prosecution of state and interstate rate cases before state commissions and the Interstate Commerce Com. At outbreak of war, assisted Committee on Classification of the Personnel in the Army in development and installation of the Army personnel system. Dir. of the Division of Trade Tests of same committee. Developed Trade Specifications of the Army and Trade Tests for determining vocational qualifications of persons on basis which was standardized for use throughout army. Ass't to Dir. Gen. of the U. S. Employment Service. Executive Dir. of the Nat. Assoc. of Employment Mgrs. Specialist on railroad operation, state and interstate rates, labor and industrial management.

KEIR, MALCOLM. Ass't Prof. of Industry, Univ. of Penna. Resigned to take up work as "Labor Expert" for the Industrial Relations Branch, Gen. Administrative Branch, Office Dir. of Purchase and Storage, War Dep't. Has had articles accepted by *Journal Political Economy*, *Education*, *Scientific Monthly*, and other magazines.

KENDALL, HENRY PLIMPTON. K.A.B., Amherst, 1899; Pres. Lewis Mfg. Co., Wateree Mills, Walpole Trust Co.; treas. Plimpton Press, Slatersville Finishing Co.; mem. firm Holliston Mills; Dir. First Nat. Bk. (Boston), Reed-Prentice Co., Dir. Boston Chamber of Commerce, mem. Am. Soc. M. E., Nat. Soc. Promotion Industrial Edn. (bd. govs.), chairman of the Committee on Industrial Relations of the Chamber of Commerce of the U. S.

LAPP, JOHN. Publicist, Ph.B., Alfred Univ., 1906. Grad. Scholar in polit. science, Univ. of Wis. 1906-7; fellow in economics, Cornell Univ., 1907-8; legislative ass't for Legislative Voters League, Chicago, during session Ill. Legislature, 1907; ass't in politics, Cornell Univ., 1908; legislative reference librarian of Ind., Oct., 1908-13; dir. Ind. Bur. of Legislative Information, 1913-; Sec'y State Commn. on Industrial and Agri. Edn., 1912-13; mem. Federal Com. on Vocational Edn., 1914; managing editor of "Special Libraries," 1910-17; assoc. editor *National Municipal Review*, 1912-13; *Am. Political Science Review*, 1914-. Trustee Alfred (N. Y.) Univ.; Lecturer in Legislation, Ind. Univ.; Dir. *Authors Learning to Earn*, 1915. *Our America—The Elements of Cures*, 1916. *Compiler: Important Fed. Laws*, 1917. Contributor to review of legislation in *Amer. Political Science Review*, etc. Director of Investigations, Ohio Health and Old Age Insurance Commission.

LITCHFIELD, I. W. In charge of skilled labor for the U. S. Employment Service, U. S. Department of Labor, and now in charge of the Professional and Special Division which is being created.

MACY, V. EVERIT. Commissioner of Charities and Corrections of Westchester Co., N. Y., Chairman of the Bd. of Trustees of Teacher's Coll., N. Y. Trustee of the Metro-

politan Museum of Art and various other philosophical and educational organizations. Dir. of the Mechanics and Metals Bank, Central Union Trust Co.; Seaman's Bank for Savings, St. Louis and Southwestern R. R. and various other corporations. Has written articles on various labor and social questions.

MALLERY, OTTO. Member of the State Industrial Bd. of Pennsylvania. Sec'y of the Emergency Public Works Commission of Penna. Staff of the War Labor Policies Bd. in charge of the development of public works by states and cities during the transition period.

MEAD, ELWOOD. Chairman of the State Rivers and Water Supply Commission of the State of Victoria, Australia, from 1907 to 1915, during which time nearly one year was spent in Europe studying state aid and direction in land settlement, as the beginning of a closer-settlement policy in Victoria. On return to America in 1915 was chairman of the Cost Review Board of the U. S. Reclamation Service. In 1915, was first professor of Rural Institutions in the Univ. of California, probably the first chair of the kind created in this country. In 1916, chairman of the Commission which reported on Colonization and Rural Credits in California, and wrote the report. Now Chairman of the Cal. State Land Settlement Bd., and temporarily assisting Secretary Lane in working out settlement plans for the soldiers.

OSBURN, WILLIAM F. Ph.D., Columbia. Prof. of Sociology at the Univ. of Washington. On leave since June, occupying the position of Dir. of the Cost of Living Dep'ts of the Nat. War Labor Bd. in Washington, D. C. *Publications*: "Uniformity and Progress in Child Labor Legislation." Has contributed articles to the American Statistical Association publications, *The Political Science Quarterly*, *The Economic Review*, *The Survey*, *Scientific Monthly*, etc.

ROCKEFELLER, JOHN D., JR. Capitalist. A.B. Brown Univ., 1887; associated with his father in business enterprises; Dir. Colo. Fuel and Iron Co.; Manhattan Ry. Co., Merchants Fire Assurance Corp'n. Active in S. S. and philanthropic work; chmn. bd. Rockefeller Foundation; trustee Rockefeller Inst. for Med. Research; dir. Gen. Edn. Bd., Bur. Social Hygiene, Internat. Health Bd., China Med. Bd.

RUMI, BEARDSLEY. Ph.D., Univ. of Chicago, 1917. Instructor in Psychology, Carnegie Inst. of Tech., Pittsburgh, Pa. Statistician for the Laboratory of Social Hygiene, Co-Dir. of Trade Tests, U. S. A. *Publications*: Reliability of Mental Tests in the Division of Academic Group, published in *Psychological Monographs*, 1917. The Measurement of the Efficiency of Mental Tests, published in *Psychological Review*, 1916.

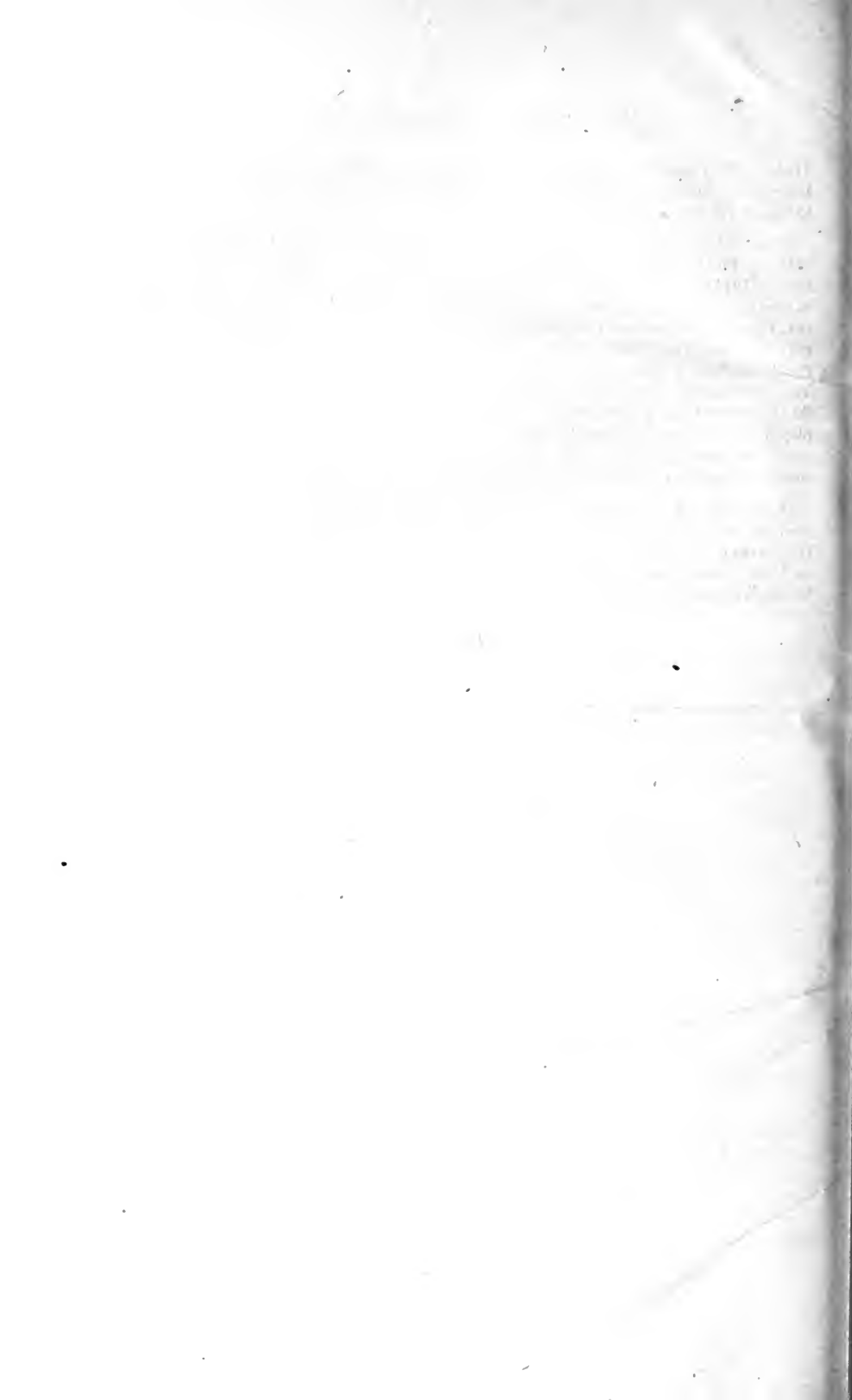
SCHWAB, CHARLES M. Capitalist; ed. village sch. and St. Francis Coll. Entered service of Carnegie Co. as stake-driver in engrg. corps of Edgar Thompson Steel Works, becoming chief engr. and ass't mgr. 1881-7; supt. Homestead Steel Works, 1887-9; gen. supt. Edgar Thompson Steel Works, 1889-97, Homestead Works, 1892-7; pres. Carnegie Steel Co., Ltd. 1897-1901; pres. U. S. Steel Corp'n., 1901-03; now chmn. bd. Bethlehem Steel Corp'n., Bethlehem Steel Co.; dir. Empire Trust Co., Empire Safe Deposit Co., Chicago Pneumatic Tool Co., Am. Universal Mill Co., Fore River Shipbuilding Corp'n., Silver Co., Chase Nat. Bank. Apptd. Dir. Gen. of shipbuilding, of U. S. Shipping Bd. Emergency Fleet Corp'n., Apr. 1918.

VAN KLEECK, MARY. Smith Coll. 1904; 1914-1917, Instructor on Industrial Conditions, N. Y. School of Philanthropy; 1909-December, 1917, Dir. Division of Industrial Studies, Russell Sage Foundation; January 1918 to July 1918, Dir. of the Woman's Branch, Industrial Service Section, Ordnance Dep't, Washington, D. C.; July, 1918, to present, Dir. of Woman in Industry Service, U. S. Dep't of Labor and member of War Labor Policies Bd. *Publications*: Books pub. by the Russell Sage Foundation, "Women in the Bookbinding

Trade"; "Working Girls in Evening School"; "Artificial Flower Makers"; "A Seasonal Industry—A Study of the Millinery Trade in New York." Articles published from time to time in *The Survey* and other periodicals.

WILLITS, JOSEPH HENRY. A.B., Swarthmore Coll., 1911; B.S. same, 1912. Instr., same, 1911-12; Ph.D., Univ. of Penna., 1916; Instr. in Industry, Wharton School, Univ. of Penna., 1912 to date; Special agent for the City of Phila., investigating unemployment in the City of Phila., April 1915, under Dir. of Public Works, Morris L. Cooke; Consultant, Industrial Betterment Committee, for the American Hardware Mfr's Assoc., Jan., 1917 to Sept., 1917; Sec'y of the Phila. Assoc. for the Discussion of Employment Problems, June 1915 to date; Employment Sup't, Naval Aircraft Factory, Navy Yard, Phila., Sept. 1917 to date; Editor in charge, May 1916 and May 1917 *Annals of the American Academy of Political and Social Science*, devoted to "Personnel and Employment Problems in Industrial Management" and "Stabilizing Industrial Employment," respectively; author of Report on Unemployment in the City of Phila., 1915; and author of numerous short articles on employment and personnel subjects.

WILSON, IDA M. For several years was in a central employment bureau and acted as Voc. Dir. in Spokane, Wash. Sent by War Industries Bd., Employment Management Div. to the government's intensive training school in Employment Management in Rochester Univ. From there went to U. S. Air Nitrates Plant No. 2 at Muscle Shoals, Ala., as Women's Employment Chief.



British Demobilization Plans

By ROBERT C. CLOTHIER

AT the end of the Boer War, England suffered from civic unrest as a result of the unplanned unloading of soldier personnel on industry. The lesson was not forgotten. Sixteen years afterward, before the greatest war of England's history had approached an end, definite plans for the dismissal of its soldier personnel were evolved in order to prevent the recurrence of such unrest. It was evident that, owing to the numbers of men involved, the unrest in 1919 would be far more acute than it was in 1902 unless some counter-influence were exerted.

The probability of such unrest must necessarily be greater in the case of England than in the case of the United States, owing to the fact that, actually and proportionately, England has sent more men to war than America has. Approximately, the British Isles have sent one man to every ten of their population. The United States has sent one man to every twenty-five.

England is industrially very much alive. Her manufactures are operating with diluted and substitute labor—much of which wants to “stay put.” It is true that the reestablishment of British industry on a peace basis will open up positions which have been closed during the war. Yet it will also close hundreds of thousands of war jobs, the holders of which will demand employment elsewhere. Now, the army personnel is to be released—superimposed upon the “dilutees” who want to stay put and the war-workers who must have employment in peace-time production. In short, England as a nation has stretched its labor personnel to the utmost to create her armies and to man (and woman) her essential industries. Can it “contract” its labor personnel to normal as easily?

These considerations, viewed in the light of her experience of 1902, determined that in demobilization the interests of the army should be subordinated to the interests of industry. In the plans for demobilizing the armies, worked out by the Director of Mobilization, the basic factor (after the factor of military safety) was not the convenience of the army but the needs of industry for

certain kinds of men. Thus, as a corollary, it became a fact that demobilization should take place according to the industrial classifications of the men and the requirements of industry for men of those classifications *in the order in which they are wanted*.

This conclusion was reached in part by a process of elimination. Demobilization by units was set aside in the beginning. It was seen that such a plan would flood British industry with man power without reference to its fitness, much of which would be worthless in the initial stages of civic reconstruction and which, for that reason, would provide an added problem of unemployment to those already confronting the government. It was also recognized as unfair to the millions of men overseas if those at home, just because they were on the spot, were given the first opportunity to secure work. In short, the priority of demobilization is not determined by geographical location, or by age, or by length of time in the service, or by the fact that some have family obligations and others have not, although all these factors are given consideration in the selection of men for early release. The primary factor in the priority of demobilization is the individual's special occupational fitness. The men needed first for industrial and civic reconstruction will be released first. The others will be released in such manner and sequence as will make it possible for industry to absorb them most readily.

THE BRITISH ARMY SYSTEM

This establishes the need for a priority list of industrial groups prepared according to the relative requirements of the different industries, this list to be used by the army as a guide in selecting the men for early release. Because England planned her methods ahead, the machinery for determining these priorities was ready and set up when the time for action came. There was no need for a hurried and ineffective attempt at the last minute to find out what men were wanted first.

It may be of interest, especially to readers familiar with army procedure, to touch on the system used by the British army to determine its officers' and soldiers' industrial qualifications as a basis for selecting them for release according to the priority list. Each soldier carries on his person an army book, a small water-proof booklet containing his pay record and other important

information. In this is entered his trade and industrial group as ascertained previously, either when he entered the army or subsequently on his return to England. There are forty-one industrial groups provided for in the British plan, as follows:

- | | | |
|--------------------------|---------------------------------------|-----------------------|
| 1. Agriculture | 16. Leather tanning | 28. China |
| 2. Seamen | 17. Other leather trades | 29. Brick |
| 3. Coal mining | 18. Clothing | 30. Building |
| 4. Other mining | 19. Sawmilling | 31. Railway |
| 5. Slate mines | 20. Furniture | 32. Dock laborers |
| 6. Quarries | 21. Coachbuilding | 33. Carters |
| 7. Food | 22. Shipbuilding | 34. Motor drivers |
| 8. Explosives | 23. Iron and steel manu-
facturers | 35. Public employes |
| 9. India rubber | 24. Tin plate manufactur-
ers | 36. General laborers |
| 10. Printing | 25. Iron foundry | 37. Commercial |
| 11. Woolen | 26. Engineering | 38. Warehouse men |
| 12. Cotton | 27. Other metal trades | 39. Domestic |
| 13. Other textile trades | | 40. Other occupations |
| 14. Dyeing | | 41. Employers |
| 15. Bootmakers | | |

These industrial groups are not arranged here according to priority. The priority is subject to change from time to time as the need for men by industry changes.

Under the British plan, an order is to be issued by the War Office at the proper time (probably before this article appears) that all unit commanders shall classify their personnel on special forms, according to (first) the man's industrial classification and (second) his "dispersal area." In explanation of the latter term, the British Isles are divided into districts known as dispersal areas, each of which has its dispersal station, corresponding to the cantonments America is using as demobilization camps.

Each of these army forms is forwarded to the next superior officer where it is consolidated with similar reports and forwarded on and up through military channels until a consolidated report is in the possession of the War Office which shows the number of men of each industrial group from each dispersal area in each command, at home and overseas. Three weeks is the period of time estimated as elapsing between the issuing of the order and the receipt of the tabulated information by the War Office. With this information in hand, both as to the classification of the men in the army and the sequence of industrial groups, an allotment of numbers is issued to the overseas forces and to the com-

mands at home, to the end that proportionate numbers of men from overseas and from within the United Kingdom of the proper industrial groups shall be returned to civil life at such times and in such order as they are needed.

The time consumed in obtaining from the field the reports of the composition of the forces in terms of industrial groups is used to good effect in the setting up of the military machinery for demobilization. In the demobilization regulations this is made clear as:

The creation of cadre establishments for units of all armies for the care of matériel—guns, equipment, etc.; the formation of army units, composed of men who are specially trained in their duties, which are to draw the men from the army, receive them at designated points, transport them to England, disperse them there; the creation of a system of payment for dispersed soldiers; the making of arrangements for the collection and storage of arms and equipment; the preparation of the necessary army forms for the classification, selection and releasing of men; estimating and coördinating the transportation of facilities available; making arrangements for concentrating, embarkation and disembarkation; preparation for the accommodations for officers and men and horses, including these temporarily incapacitated.

The "army units" referred to in the second line of the above are "dispersal units," each of which comprises sufficient trained personnel to clear 2,000 men in twenty-four hours. Usually one dispersal unit is thought of as located at a dispersal station, but when more than 2,000 men are expected to pass through a given dispersal station in twenty-four hours, more than one dispersal unit is assigned to it. For assignment to eighteen dispersal stations there are thirty dispersal units.

At the same time, the War Office is engaged in selecting and releasing certain special individuals needed by the army to carry on the work of demobilization and resettlement. These are defined, first, as "demobilizers," men to be called out of the army to serve in a civil capacity, such as trained pay and record clerks, overseas traders, civil police, doctors, etc.; and second, as, "pivotal men," the key men in the various industries without whom the bulk of the men to be employed cannot get to work effectively.

It is the intention of the War Office, while demobilizing the armies by occupational groups and while releasing equal numbers of men from units at home and from units overseas, to permit the commanding officers sufficient latitude in selection to give preference to men who have been longest in the field and to those who are married.

Critics who see this procedure from a strictly military viewpoint may comment unfavorably upon the fact that it honeycombs the military units and therefore destroys their effectiveness. It must be borne in mind, however, that all this machinery for demobilization by industrial groups is made conditional upon military safety. In all these plans for dispersing the armies, prior consideration is given, above all things, to the possibility of ill-faith on the part of the enemy and the necessity, for that or other reasons, of being able to exert military power on short notice. Consequently such criticism, if expressed, is hardly justified. It is true that to permit demobilization by individuals the British plan provides for the reduction of units to cadres—about one-third of war strength in some cases and less in others—but sufficient for the care, transportation and eventual dispersal of animals, guns, equipment and other material.

After the reports of the men (by industrial group and by dispersal area) are dispatched to the War Office, after the priority of industrial groups is determined, and after the allotment numbers are issued to the various commands and are prorated to the constituent units, each unit commander selects the men to be forwarded according to their industrial groups and, in less degree, to their length of service, their domestic responsibilities and other personal considerations. Thus thought is given in each man's case to his relative right to early release, but the program as a whole lays special stress upon the need, of industrial Britain for workmen of the right kinds.

As each man leaves his unit to go home he is given a dispersal certificate, which gives all information needed en route and at the dispersal station. This dispersal certificate, issued to him by his unit commander, gives his name, his destination, the equipment for which he is responsible, his dispersal area, his military unit, his industrial group, his trade within that group, his medical category and other pertinent information. These men selected for dispersal, each with his dispersal certificate, are sorted abroad into collecting camps, which are affiliated with the various sea and rail routes serving the several dispersal areas in the United Kingdom. These dispersal areas are laid out, not mechanically, but according to the territory served by the different railroads.

Soldiers in units at home are collected at designated stations and are handled in like manner.

At the collecting camps overseas the men are grouped into drafts of several hundred each. These drafts are forwarded to the British Isles as quickly as transportation is available and there proceed directly to their respective dispersal stations. Thus each man comes to the dispersal station nearest his home, fully equipped; the British plan provides for the use of each soldier as a "carrier" in transporting his personal arms and equipment to England. At the dispersal station he is kept only a few hours; he hands in his arms and equipment, assuming charge for any lost articles. Here he receives an unemployment donation policy, a railway warrant to his home, a certificate entitling him to a suit of plain clothes at 50 shillings wholesale, a cash payment of two pounds to be charged against his account, a service gratuity of one pound for each year of service, a war gratuity (undetermined in amount) which is supposed to compensate him for the loss of the ancient and honorable privilege of looting, and a protection certificate. This certificate he must be prepared to present in order to obtain from the Post Office the money orders which are to be sent to him periodically thereafter for his pay, and his separation and family and ration allowances, all of which are to be continued to him during the twenty-eight days furlough which is allowed him after his dispersal.

Each man is permitted to retain as his private property his uniform, boots and underclothes. He is permitted to retain his greatcoat during his furlough but must return it at the conclusion of the twenty-eight days. He may wear his uniform during this period but at the end of it he will be expected to have reclothed himself in plain clothes. Allowance for purchasing plain clothes, as stated above, is in the form of a certificate which entitles him to a suit of clothes retailing at 57 shillings 6 d., and wholesaling at 50 shillings. If the soldier cares to do so he may exchange this certificate for fifty shillings cash. It is interesting in this regard to know that owing to the concentration of industry on war needs there is not an adequate supply of tweeds, worsteds and other appropriate goods to make all the plain clothes needed. To help solve this problem it is planned to subject to special treatment,

the great amount of khaki cloth on hand, thus making it appropriate for use in the making of civilian clothes.

The unemployment insurance policy issued to ex-soldiers is the same in nature as the regular national unemployment insurance policy. This insurance is free; there are no dues and there are no "waiting weeks," as is customary in industrial insurance. The benefit is not called a benefit but a "donation," for the purpose, psychologically, of leading the man to secure employment at the earliest opportunity.

The procedure explained in these paragraphs applies *in principle* to officers as well. The furlough and the unemployment insurance are not granted to officers.

The demobilization of the Queen Mary's Army Auxiliary Corps (women) will be carried out on similar lines. The women are formed into dispersal drafts and cleared through dispersal hostels; in their selection for release special attention is given to their dispensability and to their domestic obligations.

UNDERLYING CONDITIONS

In preceding paragraphs we have considered the actual machinery of demobilization and dispersal. This paper should touch similarly on the underlying conditions upon which this procedure is based. One of the foremost factors to be considered in this regard is sea transportation. The chartering of ships and the providing of adequate wharfing facilities are, in the case of the British, taken care of by the Ministry of Shipping which functions at Paris under the Allied Council. Obviously, the more ships that can be spared from other national requirements the quicker will be the process of repatriation. It is interesting to note, however, that General Burnett-Hitchcock, Director of Mobilization, stated to the writer of this paper that the neck of the bottle in the demobilization of the armies overseas will prove to be the wharfage facilities in France. The General believes that this will be true in the case of America's armies as well.

With reference to land transportation, it is planned to release from the army among the first the technical railroad men needed to operate the roads during this period of increased passenger and freight traffic. Ample rolling stock is on hand. The coordination of the sea and land transportation facilities of the United

Kingdom will be carried out under the Director of Movements and Railways, who functions under the Director of Mobilization.

The all-important question of the supply of raw materials is being studied under the Ministry of Reconstruction. Steps are being taken as far as possible to secure sufficient supplies of raw materials well in advance. Similarly plans are in effect whereby adequate financial assistance will be given manufacturers and others whose businesses have been disrupted by the war in order that they may be enabled to reorganize as quickly as possible for peace-time production.

The care of the ex-soldiers and ex-officers who are still unfit for civil life owing to their injuries is assumed by the Ministry of Pensions. These disabled men must be accommodated and arrangements must be made for this accommodation without impeding the dispersal of returning troops. It is stated that the present hospital facilities will be adequate for the handling of this class of personnel. There are 400,000 hospital beds in England available for the purpose.

Thus, in summing up, we see that the British War Office intends that the men of Britain shall be returned to industry in the order in which they are wanted. The machinery of demobilization is organized with this in mind. Through the functioning of this machinery men are brought back to the localities where they will be useful, but no attempt is made arbitrarily to assign them to specific jobs. It is not to be supposed, however, that because there is no military agency to accomplish this result that provision is not made for the resettlement of individuals in productive industrial life. Officers and soldiers are given every assistance in securing work for which they are qualified. Those who have openings to which they can return of course will require no assistance; but those who have no such positions awaiting them must either establish industrial contacts themselves or secure help in doing so. In order that they may receive proper assistance, those who wish it are privileged to fill out army forms, prepared for the purpose, at the time when the unit commanders are classifying their personnel prior to the withdrawal of men. There is one form for officers and soldiers of like standing in civil life; there is a separate form for soldiers of artisan standing in civil life. These forms are sent to the Ministry of Labor, under which are

two organizations; the Ex-officers' Resettlement Committee, which is equivalent to an employment exchange for professional and business men, and the Labor Resettlement Committee, which assumes the same responsibilities with reference to tradesmen. The latter functions primarily through the employment exchanges of the Ministry of Labor, corresponding in general to the offices of the United States Employment Service.

SALIENT POINTS FOR AMERICAN DEMOBILIZATION

There is much in the British system that does not apply to our own conditions. It is believed by many, however, that demobilization according to some industrial standard is necessary for America too if unemployment and labor unrest are not to ensue. It is not the purpose of this paper to offer an opinion on this point. The responsibility of replacing discharged soldiers (and ex-munitions workers) in industry is, however, a function that is very clearly located. There is need for some agency to help men get jobs they are qualified to fill when they want help of that kind. No service of this kind should be made mandatory. The individual will resent any such service imposed on him. He will, however, be grateful for the same service if proffered to him on a voluntary basis.

It is apparent that at this time there is an exceptional opportunity offered to the United States Employment Service—and a corresponding responsibility imposed upon it. Whether demobilization of the armies at home and overseas be by military unit or on some industrial basis as in the case of the British, the need for a national employment clearing house is evident. The need will be especially acute if demobilization is by military units, inasmuch as, in that case, a larger proportion of men will be released from the army for whom there are no welcoming jobs waiting at home. These men will, unavoidably, have greater difficulty in finding their places. Naturally they will require assistance to a greater measure than men released because they are *needed* now by industry.

When America entered the war, the Secretary of War created the Committee on Classification of Personnel, a group of business specialists who had engaged in practical personnel work in industry. Under the direction of this group, a functioning system was

created in the army whereby the millions of men flowing from industry into the army were classified with a high degree of accuracy, trade-tested in the cases of certain skilled trades, and placed in positions where their skill could be used by the army, not thrown away as unfortunately was the case in Britain's hurried mobilization in 1914. This has resulted in the increased effectiveness of the army through increasing the effectiveness of the individual officer and soldier.

The process of demobilization offers a parallel opportunity for constructive work of this kind. The gears of the machine are thrown in reverse and the vast supply of personnel will henceforth flow from the army back into industry. Under this changed state of affairs, the importance of the principles of *the proper placement of the individual* remains a constant. It is equally true that the abilities of men must be determined and used if those men are to find happiness and be of maximum service to industry.

In short, we have been engaged in analyzing men and placing them properly in the interest of military effectiveness. Now we should perfect the machinery through which these men should be given the opportunity to have their abilities determined and to be put in contact with jobs for which they are fitted—in the interest of industrial effectiveness.

In large measure, the methods used by the army in placing men in work for which they are fitted can be adopted by industry. Recruits entering the army do not fill out their own forms as is so frequently the practice in the employing offices of industrial concerns. They are cross-questioned by trained interviewers who enter the data for the soldiers on their records. Scientific trade tests have been worked out in coöperation with industrial concerns and the tests themselves tested to establish their accuracy. Recruits claiming skill in the metal and woodworking trades are given trade tests and their proficiency definitely established. Officers of technical units calling for skilled men are thus assured, especially in the case of those trade-tested, that the men furnished them can do the work for which they are requested.

Army trade specifications have been prepared and published in pamphlet form for the use of army officers in requisitioning skilled men. For each of over 600 trades needed by the army, there has been carefully studied out (a) duties of the tradesman, (b) qual-

ifications entitling a man to undertake such work and (c) substitute occupations to be called on if men of the original trade are not available. For example:

FORGING MACHINE OPERATOR

Duties

1. Operation of standard types and various kinds and sizes of forging machines, such as bulldozes and hydraulic presses on general work.

Qualifications

2. Should have thorough knowledge of rivet and bolt forging machines, screw, toggle and hydraulic presses for heading staybolts, forms and all classes of press forgings of various materials.

Should have a practical knowledge of coal, gas and oil types of forge furnace, and the proper heating of various material for forgings.

Must be able to set and adjust dies and maintain same and be able to turn out uniformly dimensioned product.

Substitute Occupations

3. Drop forge operator, press operator, heavy forge blacksmith, blacksmith.

The use of these specifications establishes a uniform language. There is no possibility of the depot camp personnel officer furnishing the wrong kind of men through misinterpretation of terms. A drill-press operator is a certain definite kind of man; a bench hand is another. The use of these specifications prevents the forwarding of bench hands when drill-press operators are wanted, merely because they are both mechanics.

All this work in the camps has been done by officers and men of ability and training who in business life command proportionate salaries. Without this superior personnel, these superior results would have been impossible. An effective machine in the hands of low-paid men of mediocre ability functions with the effectiveness, not of the machine, but of the men.

It is believed that these methods are equally adaptable to the proper distribution and placement of men in industry. It is believed that the tradesman returning to industry has the right to have his ability determined and recognized and to have assistance in securing the position to which his skill entitles him. It is believed that similarly the employer is entitled to have some certification of the ability of the men referred to him, for any mismatching between the man and the job results in loss to the employer as well as to the man. And certainly by the establishment of uniform trade terminology, it should be made possible

for the employer to be confident of receiving the kind of man wanted and for the man to be saved the possibility of setting forth on a job for which he is not qualified.

In so far as steps to this end have already been taken by the Labor Department in all cities say over 25,000, the United States Employment Service is in a position to assume this gigantic task of placing our army personnel back into industry—and not only that but also the task of acting permanently as a means of contact between the American employer and the American workman. If at any of its offices machinery of this type is not in full use and operation, an opportunity undoubtedly exists for the United States Employment Service to increase its effectiveness and value to the country.

There is much in the British plans for demobilization that is of significance to us. Their method of release of men from the army is perhaps not parallel to ours. Yet American business can learn a lesson from the British plans for resettlement and from the American system of fitting men into the army which, if heeded, should result in the establishment of a machine which would prove a permanent asset to American industry.

Release of Industrial Leaders from Government Service for Industrial Supervision

By MARK M. JONES

WE hear that we are on the dawn of an era of super-organization of business; that industrial units will be larger; that industrially we must be more economical and more efficient if we are to compete favorably in the world's markets; and that our business viewpoint must henceforth be international rather than national in its scope.

If this be true, the American nation will need leadership of the finest kind. It will particularly require men of initiative, adaptability, resourcefulness, broad knowledge of business conditions, and highly developed capacity to use things economically and efficiently.

With such an approach it seems that in connection with demobilizing labor, the release of industrial leaders from government service for industrial supervision has four main aspects:

1. Where is the need in industry?
2. The program for release of leaders for industrial needs.
3. Will executives return to their pre-war occupations?
4. What will be the result of their government service?

THE NEED IN INDUSTRY

A primary need will be in the many shipbuilding plants of the nation. The production problems of these enterprises are such as to tax the resources of the highest type of management, and the need for men of initiative who can strike out independently, regardless of conditions, yet play the game with others so well that the necessary teamwork and coöperation may emerge, will be great.

Leaders will certainly be required in those war industries which face the problem of developing markets in order to prevent both new and old equipment from being idle. Many of these enterprises have simply manufactured their regular product as a war essential at a higher rate of production, while others have done special work with new equipment, for which they must now find a

product that has a market in peace times. Sales organizations have been discontinued entirely in some cases, whereas in others they have worked according to a much restricted program with the idea of holding enough of an organization together to return to peace conditions. To such fields many men will return richer in experience and with a wide field of opportunity.

The so-called "less essential" industries offer a distinct problem. Many were curbed to meet war necessities in money, materials and men. They will be facing the problem of expansion to a pre-war basis. It will be necessary for them to gather together an organization in many cases, while in others the nucleus which has been held together must be expanded for increased production.

A further need for executive talent will be found in the new industries which will grow out of the inventions and the special circumstances of the war. A striking example of this will be the chemical industries which now supply home needs, yet have many problems to overcome before they are in the most favorable position for competition in the world's markets.

The return to industries of the individual whose position was not or could not be filled when he entered government service is a pressing problem. We all know of many instances where important men have not been replaced. Their work has been distributed among associates who have speeded up as a patriotic effort. Naturally their increased speed could not be maintained continuously and many leaders will therefore return to positions which have been administered in a mediocre way and in which great opportunities for concentration of initiative exist.

How urgent is the need of releasing industrial leaders from government service is shown in the case of managers, superintendents and foremen drawn from their regular occupations. Men for such positions should be high types of leaders. Their initiative and activity in many cases took them into government service without thought of their future. Such men have usually been of high types, and industry has suffered from their loss. Their return should be speeded, as upon them with their enlarged vision and richness in experiences will rest a large portion of the responsibility for guiding us safely into the future.

Certain presidents or executive heads of industries have their enterprises so well organized that their individual initiative might

be diverted to government service without embarrassing the enterprise. However, the initiative and pioneering experience of such men will be again needed and their guiding hand should be quickly applied to the new problems in their enterprise, which will be created by the dawn of peace.

It thus appears that upon the speed with which we divert the initiative of industrial leadership from war to peace activities will in a large measure depend the speed and quality of our economic readjustment.

A PROGRAM FOR RELEASE OF LEADERS FOR INDUSTRIAL NEEDS

The leaders in government service might be classified in three groups, as follows:

1. Commissioned officers.
2. Civilians on government work.
3. Civilians in essential industries.

Among the commissioned officers, in field as well as staff service, will be found many industrial leaders. Their release will probably be determined by military rather than industrial necessities. In many cases they will be needed to meet problems of demobilization as affecting the army, yet after the planning in connection with such problems is done, they should be released in order that the work might be carried on by others of more limited talents. The men of special prominence who have accepted commissions would undoubtedly be permitted to resign, and thus take up old activities quickly. Others of less prominence would necessarily have to be sought out and could be located through the qualification records covering commissioned personnel. Releases where permitted by military conditions and desired would undoubtedly be regulated on the basis of length of service and in recognition of excellent work.

The civilians in government service might be grouped according to those who are on full salary and those who accepted appointments on a dollar per year basis. These civilians have in some cases been loaned by the enterprise temporarily, and in other cases for the duration of the war. Others have severed connections with former employers and have entered government service as a civilian on their own volition.

So far as making available those loaned is concerned, the problem is more simple than with the commissioned officers. Some balancing of the needs of industry versus those of the government during demobilization can be arranged. In respect to those who have been in government service free of obligation to former employers, the problem will be one of redistribution in which individual initiative, the United States Employment Service and private employment exchanges handling executives will play an important part.

Placement of leaders now serving the government in civilian capacity will be more serious in those cases where a prospective opening has not been located. Civilians are scattered among a great number of departments and divisions, and are not classified in such a comprehensive manner as are those in uniform. The problem will not be so acute so far as the individuals of prominence are concerned. It will be among those whose activities have been of more limited scope that the main questions will arise. So far as leadership is concerned, however, the main problem will be in ascertaining the needs of industry and reflecting such needs to a central point in a manner which will permit of matching with the supply. It is mainly a question of how to arrange the focusing of supply and demand at the same point in order that a redistribution may be made on the most economical and efficient basis possible.

So far as the men held on government work through the operation of the selective service regulations are concerned, a less problem exists. The majority of those to be released will be found among the industries of a temporary nature for some phase of munition work. In such cases those who came from less essential industries may divert their activities into former occupations as soon as the restrictions of the Selective Service Act are removed.

In other cases where the work of the enterprise will not be materially affected, leaders who have been operating under unsatisfactory conditions because of industrial classification under selective service regulations will be free to enter new fields.

WILL EXECUTIVES RETURN TO PRE-WAR OCCUPATIONS?

It seems clear that more men in the class of leaders will go back to former occupations than will those from the workers. The majority will return to their pre-war occupation. Others, how-

ever, on the basis of a wider scope for activity, have learned of new fields in which they can better apply their talents. Individuals who formerly were in the class of misfits have found themselves, and will enter fields in which they may better apply their energies. Those who had only general qualifications prior to the war and have followed courses of study, accepted new responsibilities which have transformed them into specialists with a higher degree of skill. Such men will certainly do everything possible to cash in upon the enlarged usefulness thus created.

While the majority of leaders released from government service will return to pre-war occupations, not all will be released. It seems clear that for some time at least our standing army will be greater than ever in peace times and many will wish to remain in the military establishment. It seems reasonable to suppose that an opportunity will be afforded them to do so, and that a great many will accept it.

RESULTS OF GOVERNMENT SERVICE

Leaders returning to industry will, in the main, bring an enlarged vision and a greater appreciation of the problems of the day. Their government work has given them an international viewpoint, whereas before the war their interests were mainly national. They have had to deal with larger units than ever before in history and where they have been accustomed to thinking in tens and hundreds, a great many in order to succeed in government service have been compelled to speed up to think in thousands, millions and billions. Such enlarged capacities for administration will be a reward to be accorded an important place in the list of advantages gained from the war.

The majority will be more than compensated for their government service. Others, however, will return to peace times faded and fagged through struggles with great snarls of red tape. Many leaders have undoubtedly fussed and fumed while endeavoring to get results through "channels" and have ultimately been satisfied to slow down to the speed of their surroundings. This has been particularly true among those commissioned, and it seems reasonable to suppose that the issuance of commissions for non-combatant personnel would be very much restricted were we to enter upon another war period. Many cases have been reported where

able men have suffered diminished effectiveness as the result of the restrictions of the uniform. This of course has not been the case among those serving in civilian capacities. The issuance of commissions would probably be restricted to those serving in the field, and to a very few administrative positions of staff nature where we to mobilize again.

Among other advantages leaders will return with a broader understanding of the principles of industrial organization. They have made contacts that will cause them to better appreciate the principles underlying the control of large units and cause them to understand how to get results on a greater scale. They will also be speeded up to greater things, and will not be satisfied to settle down to the limited sphere of pre-war days. The results cannot but be helpful in advancing American industry to a more dominant position.

Probably the greatest result or the most far-reaching which will accrue from the experience of leaders in government service will be the keener appreciation of man power, and a broader understanding of the problems of human relations. How to get results from human beings has been one of the most serious questions in connection with carrying out the war program, and the majority of industrial leaders will return with a more wholesome respect for human effort, a keener desire to conserve human resources as well as a respect for the viewpoint of workers.

So far as the industrial leaders of primary importance are concerned, little need be said. Their number is small and in most cases their future is settled. With them it is mainly a problem of relinquishing their present duties, in order that they may be free for the carrying out of their plans for the future. It is among the leaders in the secondary and lower classes that the problems will arise, and so far as release is concerned, the requirements of industry will undoubtedly be subordinated to those of the military establishment. This, however, will be mainly a matter of method, and the policy adopted should move supply to demand in the most efficient manner and in the shortest possible space of time.

United States Employment Service and Demobilization

By I. W. LITCHFIELD

WHEN without hint or warning the European War was suddenly terminated, even before the complex mechanism of our great war machine had begun to synchronize, we found ourselves in the position of the German commanders, who, having trained an army for offensive operations, found it extremely difficult to retreat. There was no indication that Germany would weaken for months, and indeed preparations had been made for a possible continuance of the war through a period of years. No one had contemplated or considered the stoppage of the production machinery, much less the reversal of some of its trains, and when the armistice was signed, it was with a distinct shock that we contemplated demobilization and reconstruction, with its new adjustments and changed conditions. Millions of men had been taken from industry and transferred to the army and navy. Millions more were engaged in production of materials that were not needed when hostilities ceased. Factories had been changed over for the production of essential war-time material, and large additions to the plants had been made. Washington was frankly in a state of consternation. Even with the most intelligent action on the part of governmental authority, a critical condition seemed inevitable. If the immediate peace-time demands were large enough and sufficiently varied to absorb the labor that would soon be released from war work, the problem would be merely one of adjustment, but if during the transfer it developed that there was a lack of confidence in the future, and there should occur the dreaded period of "marking time," only the wisest governmental management could prevent a period of stagnation. The most serious feature of the case was that a tremendous number of men ordinarily engaged in out-of-door work were to be thrown out of employment at the beginning of winter, when there would be little opportunity for them to work on farms, highways, railroads or building projects.

In England a committee under the minister of munitions had been

studying reconstruction almost from the time the war began. Very complete plans for redistribution of labor and allocation of materials had been made, and almost coincident with the signing of the armistice these plans were made public. No such study had been given to the matter on this side of the water. A short time ago the President had asked the Council of National Defense to make a study of certain phases of reconstruction, but the committee in charge had hardly had time to do more than make a rough survey of the field.

AGENCIES FOR LABOR DEMOBILIZATION

The agencies upon which the responsibility should rest for the demobilizing of the army and the proper allocation of materials, taking into consideration the needs of Europe, are the War Industries Board, in connection with the Food and Fuel Administrations and the War Trade Board, the Department of Labor and the General Staff of the Army. The United States at this moment stands as the industrial arbiter of the world. It represents a great public service corporation upon which rests responsibility for universal service. An essential part of the raw material and finished products needed in Europe must be furnished by this country. The obligation is chiefly an economic one, because if the loans to our associates are to be reimbursed, they must be placed in a position to earn and pay. It therefore seemed important that some governmental agency should determine how much material could be spared for European reconstruction and allocate the remainder that can be devoted to the readjustment of domestic industry for the requirements of civilian consumption. It seemed obvious that if a scientific redistribution was to be made it should be done through the agencies which had proved their worth during the time of stress, and which could be trusted to conserve our available supplies so long as such conservation might be needed. It also seemed obvious that the War Industries Board was particularly well equipped to supervise the redistribution of material in connection with the other war boards, because of its detailed knowledge of industry, and its intimate connection with every form of production. Unfortunately no announcement of such a redistribution committee has been made as this is being written. With the knowl-

edge and needs of industry indicated by the allotment of material, the Labor Department would be equipped to direct returning soldiers, and distribute the army of war workers in this country to peace-time occupations, provided the Secretary of War would recognize the industrial necessity and demobilize the army in accordance with the suggestion of the Department of Labor.

DEVELOPMENT OF THE UNITED STATES EMPLOYMENT SERVICE

Although the machinery of the employment service was designed to be ready for quick reversal, incomplete organization found it somewhat unprepared. The foundations for the structure had been laid throughout the states and some parts of it were practically completed, but it had only had half the time for construction of most of the other war agencies, and had not yet nearly reached its maximum efficiency. It was something of a war afterthought. A brief history of its development may be suggestive of its possibilities for post-war labor placement.

In July, 1917, four men having somewhat similar ideas on the subject of man power for the needs of war industries chanced to meet in Washington, and after casting their fortunes together for the purpose of securing men for the government and governmental contractors, looked about for a connection that would give them the proper scope and facilities. They were logically drawn to the Department of Labor, where they found sympathetic interest and attention, and through the coöperation of Secretary Wilson, founded the U. S. Public Service Reserve. A national organization was projected, consisting of a national director and associates in Washington, state directors, county directors, and enrollment agents in communities. The more important states were organized at once, and before the end of the year the organization was completed in practically all of the states, and the work of recruitment for the various governmental operations was well under way. In the meantime a great need for administrators, engineers and technical men had developed in Washington largely for commissioned men in the army and navy, and before the end of the year the original 6,000 engineers with which the reserve started, had been increased to 18,000, and a large number of these men had been placed in positions of responsibility.

The first important work of the reserve was entrusted to it by

the Shipping Board, through Mr. Hurley, who designated it as the agency to fill the needs of the shipyards. This commission covered the requirements of some 160 yards on both coasts, and as shortages developed in the needed trades, the 15,000 enrollment agents of the reserve became more and more useful. By this time the state machinery had become so well articulated that when on various occasions the army required many thousands of men for special induction purposes, the reserve was able to furnish them very quickly and exactly according to specifications.

The department had for some time contemplated the establishment of a national employment service, but had not been in a position to accomplish it. There were in existence about ninety departmental employment offices that had been created from time to time, primarily to place immigrants. Many of these offices were located at or in the vicinity of immigration stations, and although they had been used for placing common labor other than immigrants, they did not attract the higher class of artisans. In the spring of 1918 the employment offices were divorced from the immigration service, and the U. S. Employment Service was created. This organization was superimposed upon the U. S. Public Service Reserve, which had been in effect an employment service, for although its province was principally recruiting, it had of necessity done considerable placement. More than half of the state directors of the U. S. Public Service Reserve were immediately made directors of the U. S. Employment Service, and in states where the two were not identical, a close coöperation was established. The reserve was given the work of recruiting, while the employment service took charge of the placement as well as of such recruiting as it could readily handle. It is obvious that the creation of such a large organization in a short space of time brought about embarrassments and necessitated many changes, and that ideal conditions could not obtain everywhere. Neither was it possible at all times to work with the best coöperation where the director of the U. S. Employment Service and the director of the U. S. Public Service Reserve were not identical. In general, however, the operation of the service was very effective.

At the time the reserve was formed, one of its objects was to establish a system of scientifically operated state employment services, divorced as far as possible from politics and other con-

siderations, with national supervision, and so organized that it would be possible to get the statistics of employment and non-employment from every part of the country. Because of the practical nature of this information, an effective intra-state clearance system could be established, which would result in reducing congestion either of labor or work at any one point, and thus, to some extent, avert industrial crises. With national supervision and clearance, a perfect distribution of labor would be afforded, and the information readily at hand would be indicative to some degree of the country's needs. This would have an influence in directing apprentices to needed trades, as well as on the output of industrial schools.

When the employment service was formed there was but one state that had even the skeleton of a working system, and even this was very imperfect. At the present time every state in the union has a federal state director of employment, with a director of the U. S. Public Service Reserve in every county, and an enrollment officer in every community. The total number of federal employment offices in the country is now approximately 850. As the service was originally laid out, the country was divided into zones corresponding to the federal reserve bank zones. In each of these zones there was a district superintendent of employment who had general oversight of the states within the area of his jurisdiction, all under the general direction of Washington. In some instances this plan did not work well, as in the keen desire to expedite organization, some appointments of district superintendents were not agreeable to the state directors upon whom the brunt of the burden naturally rested. It was therefore decided to eliminate the district superintendents, and the district offices were made the clearing houses for fiscal matters within the zones.

Up to January, 1918, the U. S. Public Service Reserve had been privately financed. About that time Congress made an appropriation of \$250,000, to which the President added \$800,000 from his war fund, upon which the employment service was operated up to the first of July. About that time Congress made an appropriation of five and a half millions. As this did not occur until the middle of the year, and the pressure for results was serious, much latitude should be given for the errors that crept into the

administration of the service, due to the imperative need for quick organization.

Aside from the difficulties in organization, the service was under other very serious handicaps. Employers were not at all particular as to how they secured labor. Government contractors having cost-plus contracts were bidding against each other, and even against the government departments, advertising high rates of wages all over the country, and seriously disturbing industry. They presented extravagant requisitions to the employment service, and when these requisitions were literally filled were unable to take on the men secured. Men recruited before the materials on which they were to work were delivered were thus made to lose much valuable time. The food, sanitation and housing afforded at the camps of some of the large projects were beneath criticism. There was oftentimes bad management, which put the laborers under many hardships. "Soft" men, those men having had little past experience, were not given an opportunity to work into their occupations gradually, although there was a tremendous dearth of men and a need for conservation of human material. These, together with many other causes, produced a tremendous turnover of labor. There was furthermore a waste of time and money, caused by the transporting of men over long distances, while other contractors were bringing men in the opposite direction, so that the utmost confusion existed up to the time that the President issued a proclamation making it obligatory upon all employers of more than 100 unskilled laborers to secure labor through the U. S. Employment Service. This proclamation tended to stabilize the movement of unskilled labor throughout the country, and placed the burden of recruiting largely on the state directors.

In order to strengthen the machinery within the state, state advisory boards were created, composed of two men and one woman representing the employers, and two men and one woman representing the employes, with the state director of the U. S. Employment Service as chairman. In the larger centers community boards were established, which were advisory to the local employment offices and subject to the state director. These consisted of one man and one woman representing the employers and one man and one woman representing the employes, with the

manager of the office as chairman. The operation of the community boards has been in general most effective. There has been some necessary delay in making appointments and some delay in giving full instructions, but in connection with the state advisory boards it may be said that they have had a tremendous auxiliary effect on the service, bringing in the element of local interest and tending to increase efficiency.

It will be noticed that no restrictions were placed upon the securing of skilled labor by employers, and the abuses that occurred early in the war were many and varied. The worst factors were the advertising for workmen by the larger concerns having cost-plus contracts at wages much higher than contractors with straight contracts could afford to pay, and the stealing of men from government contractors engaged in war work. Through propaganda sent out by the employment service, and through the strenuous exertions of some of the state directors, employers who had been engaged in these abuses were shown that they were reactionary, and as the facilities of the service for furnishing skilled labor increased, the necessity for this sort of thing became less, and was largely done away with.

It will thus be seen that when the cessation of hostilities occurred, the employment service had an organization throughout every state in the Union, ramifying into every little community; an organization that had been tried out for recruiting purposes time and time again with great success, not only for the general requirements of war industry, but also for the military arms. The district organizers who had been assisting the state directors in organizing and instructing the community boards for the purpose of recruitment, immediately turned to the local problems of placement of returned soldiers and others, and in connection with the War Industries Board, paid secretaries were appointed to act with the larger community boards to insure effective work, and to keep the state directors and Washington fully posted on the conditions of employment and non-employment. On the signing of the armistice, the community boards were immediately asked by wire to make a quick survey of the opportunities for employment in various lines of work and communicate them to Washington for the information of the Department of Labor and the War Industries Board. The scope of this information is in-

licated by the fact that the service has about 1500 community boards and about 850 local employment offices.

REVAMPING THE EMPLOYMENT SERVICE FOR POST-WAR NEEDS

The effectiveness of the U. S. Employment Service is shown by the fact that up to the first of November, 2,500,000 men had been directed to employment by the service, and at least 2,000,000 of them had found employment. Authentic figures were not available until the first of November, but during that month over 400,000 persons were placed by the service.

It must be remembered that the early work of the Public Service Reserve was largely confined to the placing of executives and professional men, principally engineers, in government service. The reversal of this work will require a very different form of organization, and plans are now being made for a professional section, with at least two zone offices, one in New York and one in Chicago, with facilities for directing men of higher qualifications to employment. The army will find out from its questionnaire how many of the officers desire to be assisted in securing business connections and give the information to the employment service. The new section of the employment service will be devoted to the work of placing these men, and through its state organizations can quickly ascertain the needs of employers all over the country. Undoubtedly some of this work will be done through the offices of the state directors, but the zone offices which will be operated in connection with the engineering societies will be in touch with all the principal opportunities, and will become the point of contact between professional men and concerns desiring their services.

As this article is being written, an exchange for teachers is contemplated. If the plans suggested are carried out, a close arrangement will be made with the U. S. Bureau of Education. A section for handicapped men is already being started, and at least six clearing house offices will be established by the time this article is published. Such a service has been maintained in the Chicago office, and during the last year 26,000 men, all of them crippled or otherwise handicapped by accident or infirmity, have been placed. Other useful lines of activity will be taken up by the service just as soon as proper attention can be given them.

It will thus be seen that even if the army is not disbanded with reference to industrial needs, the employment service will get quick contact with the discharged soldier, and is in position to secure employment if such employment exists. It will be further seen that with the addition of the special sections above indicated, the service will be rounded out to meet practically every need and will be the one central point of contact between the employer and employe from the highest to the lowest. The aim of the Department of Labor is now to improve this employment work, and give the highest type of service. Already the facilities of some of the offices that have proved highly useful are being extended, while others that will be unnecessary without the war emergency are being discontinued. Training schools are being established for examiners of skilled labor, and with the development of the work of the professional and special sections the number of zone offices will be increased as may be necessary.

It is the hope of those who have been instrumental in organizing the employment service that its operation throughout the states of the union, during the period of reconstruction, will so demonstrate its usefulness that their original aim may be realized,—that of a great national employment system, with the state as a unit, which will insure the best possible distribution of labor, prevent congestion, and reduce non-employment to a material degree.

Lessons of the War in Shifting Labor

By JOHN B. DENSMORE

TO one who has struggled night and day for many months over the problem of mobilizing and demobilizing war labor there can be but one answer to the query suggested for the title of this article by the Editor of these *Annals*. Without an industrial army of from four to ten members for each soldier, military forces would be literally cannon fodder. Without food, clothing, shelter, transportation and ordnance furnished, not by levy upon occupied territory, but by well organized forces at home, the modern army is entirely helpless. At the lowest estimate made by statisticians, that of four industrial workers per fighter, our army of three and a half million was demanding in November, 1918, the full productive efforts of fourteen million persons, or two-fifths of the entire number of men, women and children computed to be engaged in gainful occupations in this country. To attempt to recruit and properly place this number of workers by any other than federal means, at the same time drawing from the ranks of wage-earners for the armed forces, would have been as impossible as to have left the formation of our army and navy entirely to private and state initiative. The need of a federal employment service for mobilization and demobilization is a lesson of the war that would seem to require no demonstration.

Yet the actual methods by which workers secured employment and employers labor before the war and in the early months of the war before appropriations were made for the government emergency employment service throw light on various phases of the general problem and suggest other lessons that are pertinent to the subject. The successes and failures of the United States Employment Service in attempting to use every available method and employment agency in recruiting labor as rapidly as our expanding war program necessitated, throw still more light and suggest other lessons that should contribute to any discussion of after-the-war handling of problems of employment measures.

Transfer of workers in this country has rested on two theories.

In one case labor, particularly common labor, recruited in large measure from the foreign born, was considered an article of commerce. Agents made it their business to provide so many laborers, with no questions asked as to methods of recruiting, and few of the fitness of the laborers. In order to lessen for the employer the costliness of this hit and miss method, there was developed a custom of having five or ten men for every job appear at the gates of the plant. By this expedient the better men, judged by superficial appearance at least, could be chosen. By this means with its obvious suggestion of current unemployment, unrest over wages and working conditions could be kept at a minimum. I do not mean to accuse the employers of this country of deliberately planning and carrying out over a long period of years a policy to exploit the workers. The system grew. Lack of adequate and scientific means of combatting unemployment for the worker and unfit supplies of labor for the employer fostered it. The continual increase in immigration rising from 114,371 in 1845 to 1,218,480 in 1914 fostered it. The shift of the source of immigration from the northern European countries to the southern, with a corresponding shift from men typically literate and individualistic to men who have usually come in without education and with some degree of docility to political and economic conditions, fostered it.

The other system of employment in vogue in this country was to consider the individual fully competent to choose his job and to find it for himself. Was he a farmer, and had the farming center of the country shifted from New England where birth had placed him, to Kansas or even to California? Let him read! There were magazines and papers and agent's pamphlets galore to enlighten him. If he acted on the advice of subsidized magazines and pamphlets written by unscrupulous men who had never seen the land described, it was the individual's misfortune or lack of judgment. Was he a building contractor, marooned in a section that must spend a decade recovering from an ill-advised "boom"? Probably some fellow craftsman would sooner or later drift into town and tell him that Pasadena or Kalamazoo or Richmond, Indiana, would "offer big money to a man of his stripe." The cities of this country have been full of this type of employment information and misinformation. Saloons have been com-

mon centers of dissemination. A huckster plying his trade eleven months a year in St. Louis, on mere hearsay after a period of family misfortune, made his way to Minneapolis, where long winters make the street sale of foodstuffs unprofitable for many weeks. The number of serious-minded wage-earners who have annually followed such will-of-the-wisps is incalculable. Casual inquiry among the wage-earners in any city at any time, but particularly in an era of rising cost of living, would disclose a large number who had come or were about to depart with only mouth to mouth information on which to go. Inquiry among the unemployed would naturally show a still higher percentage of reliance on this flimsy and inaccurate information. Secretary of Labor Wilson pointed it out as a basis of unrest and unemployment when in a hearing before the Committee on Labor of the House of Representatives in 1916, he spoke in favor of a bill to establish a national employment bureau,

It is obvious that either method of employment cited, that of using an agent whose one interest is in furnishing a given number of workers at a given time and place, or of leaving the entire problem to individual initiative, is hopelessly inadequate, and that the burden of this inadequacy falls most heavily on the man who is least prepared to bear it. The honest uneducated wage-earner, whether immigrant congregated with his fellows in a city or American isolated in his native village, deprived of information on the location of suitable employment, may become a malcontent, a drifter, a loafer or a tramp without making known to the world the cause of his ruin.

Many attempts have been made by individuals, institutions and states to remedy the existing situation. Some of the fee employment bureaus have been run on an honest, even non-commercial basis. Many of them have done good work in a limited field. Others, even those which operate in well-kept offices and made every attempt to fit worker to work are leeches on our economic life. The seasonal character of their work may explain why it is necessary for a teacher's agency to charge \$80 for the half-dozen letters, interviews and telegrams used to place a teacher at a salary of \$800. It does not prove that the procedure is not costly out of all proportion.

Within the limits of their jurisdiction many states developed

more or less efficient bureaus. Where these services failed to be effective the failure has characteristically been due to limitations inherent in a state institution, namely, in the fact that the industry is not state delimited, and that few if any states can afford adequate supervision by highly trained, highly paid executives.

Organizations and institutions have in many cases organized employment systems that are thoroughly honest and that have the value of technical knowledge of what they offer. The chief disadvantage of this type of employment information lies in the narrowness of its field of inquiry. It is difficult for the vocational director of a literary college, perhaps carrying on her work after teaching hours, to keep in touch with fields other than teaching. It is not expected that the bricklayers union shall be able to furnish information to a member or a member's son who wishes to become a plumber.

A federal employment service was in existence at the beginning of the war. Created during the financial depression of 1917 to correct some of the evils of unregulated immigration and the contract system, it existed until 1917 with only one office, that at the chief port of entry, New York. Since that time it had been allowed gradually to expand geographically and in the scope of its work, although still nominally a part of the Bureau of Immigration, and attempted to meet its stupendous problem with an annual outlay of a few hundred thousand dollars. When in December, 1917, the production bureaus of the government studied the labor employment problem from the angle of the war needs, there were some ninety offices in as many industrial centers which had in the past year placed 283,000 workers. The Employment Service had hardly scratched the surface of the problem of war labor. Every one of the government departments and every corporation engaged in the production of material for government use felt its individual responsibility for getting results and they went out into the market for men no matter what the cost and no matter what effect it might have upon other industries that were equally essential in the maintenance of the war.

The lesson was obvious. A federal system with a hopelessly inadequate budget was useless for the emergency. In October, 1917, the Urgent Deficiency Bill approved an appropriation of \$250,000 for the United States Employment Service. In Jan-

uary, 1918, the President gave from his fund for National Security and Defense \$825,000 and the United States Employment Service was made an independent bureau of the Department of Labor. It had not, however, power to enforce its policies. It had, in the minds of such persons as knew of it, a reputation for distinctly limited service to overcome. It developed offices, personnel, policies and interstate systems of clearance for war labor as rapidly as possible. The immensity of the territory of the United States made the building up of such a system in so short a time tremendously difficult. It had to compete with unscrupulous fee charging agencies and with determined labor grabbers for employers which were fattening on the labor shortage and encouraging labor turnover.

A survey of industrial conditions soon after the Employment Service had begun to build up its machinery, while at the same time trying, as one member of our staff expressed it, "to pull a 1918 load with an 1812 model engine," showed that chaotic competition between the different branches of the national government and between private employers had seriously lowered production. Thousands of private employment agents were continually luring workers from one job to another. Men employed on government work in Buffalo were transported to another government job in San Francisco, only a week later to be carried back to Boston. This anarchy of employment manifestly served the welfare of none. Workers and their families suffered from being ever on the move. Employers were injured because of the inescapable waste due to an extravagant labor turnover. The nation itself was hurt because under these circumstances human energies which might have been directed toward victory were vainly expended in a futile search for the achievement most desired by the government.

Again the lesson was obvious. Without the force of law or coöperation due to enlightened opinion behind it, the Employment Service might still fail in its task. The President by proclamation agreed upon a plan termed "central recruiting." All production departments of the government—the Army, the Navy, and the Emergency Fleet Corporation—bound themselves to employ unskilled labor only through the United States Employment Service. War contractors were enjoined by the President to pursue an

identical policy. Others were asked on the basis of patriotism and good sense to do the same thing. The War Labor Policies Board, composed of representatives of the War, Navy, Labor, and Agriculture Departments, and War Industries Board, the Shipping Board and the Emergency Fleet Corporation, and the Food, Fuel, and Railroad Administrations, presided over by Felix Frankfurter, an assistant to the Secretary of Labor, announced furthermore that any rare recalcitrant employer who refused to cooperate with the government would be penalized. The War Industries Board, with its control of raw materials, the Army and Navy, with their control over contracts, afforded ready means of making the national will effective.

Compulsion was not sought. An appeal was made to the patriotism and to the intelligent self-interest of all concerned. The anarchy of a continuous stealing of labor from one organization for another clearly was profitable to none. It was accordingly an easy matter to obtain unanimous support for the policy of central recruiting, or of the national distribution of the labor supply of the country. Representatives of union labor and of organized management were parties to the discussions and to the negotiations, and each sanctioned the ultimate solution.

The full effects of this practical monopoly of labor placement cannot be measured directly. Central recruiting of common labor for war work was undertaken August 1. In order to facilitate the supplying of labor to the more important projects, recruiting of less than one hundred laborers was temporarily permitted by war employers and non-war concerns. Plans for the extension of central recruiting of skilled labor and woman labor were under way when the armistice cut short war plans. Some indication of the potential effectiveness of a comprehensive federal system of employment offices may be gained from the following figures. From its reorganization last January until the signing of the armistice, the United States Employment Service directed to employment, almost entirely in war industry, including agriculture, approximately 2,500,000 workers. It also increased its local employment offices from 90 to 900 in the same period. These figures represent an increase of about 1000 per cent in both labor finding activities and in the establishment of local employment offices.

The steady rate at which the service has grown in extent and accomplishment is indicated by the fact that in January last 16,642 persons were sent to jobs while during the week ending November 2, the last week but one of war conditions, 162,754 workers were directed—a rate of 650,000 a month. Returns made by employers and workers show that approximately 2,000,000 of the 2,500,000 workers directed were placed. It is impossible to know how many of the balance were placed, owing to the failure of some employers and workers to notify the service of the acceptance of workers or jobs. These totals are proof that the Employment Service has made good. For at the outset of the reorganization it was estimated that the war industries of the country would require between 2,000,000 and 3,000,000 workers up to the end of 1918. Moreover, it was not simply a case of directing to war plants applicants at the local offices of the Employment Service. The service has had literally to “dig up” men from non-war work and help reduce “turnover,” the agencies chiefly being the paid agents of the employment service, the volunteer agents of its Public Service Reserve, and more recently, the community labor boards. Patriotic help was rendered the agents and boards by employers and employees and their organizations.

Statistics on the shift of labor by industries based on these figures would be worthless because the United States Employment Service is not a monopoly in the sense that the Postal Service, or even the Railroad Administration is. The control of the shift of war labor was, however, complete enough during the last three months of the war to allow some errors and successes of method to appear. Chief among the errors, as has been pointed out, was the lack for many months of a centralized agency which could prevent a viciously large labor turnover. Another error inherent in any system that does not specifically guard against it was the recruiting of men unfitted for the work they wished to do. Many men, recruited under the federal system as well as in the early months of the war by private agencies, were sent hundreds of miles upon false or mistaken declarations of their abilities and training. In the case of the United States Employment Service this lack was recognized and a series of trade tests and uniform trade terms prepared, in cooperation with the Committee on Trade Classification of the War Department. This material is

completed and ready for use in the important task of replacing labor after the war where it most properly belongs.

Transportation conditions during the war, with the unexamined strain put upon our railroad systems, and the necessary focusing of men and supplies upon the Atlantic seaboard, make impossible any statement of "error" in the attempt to concentrate labor for war production in the eastern states. It is significant, nevertheless, to note that the various war production and industry bureaus of the government were in the fall months engaged in a survey of all important industrial centers regardless of location, and had in contemplation a wide extension of the geographic area in which war contracts should predominate. Significant in this connection is the difficulty the Employment Service had in some mid-western industrial localities in securing the full force of favorable public opinion. "We are entirely willing to undertake war work," was the explanation of many employers in these sections, "but why should we who have our materials curtailed because we cannot, for geographic reasons, secure war contracts, now give up perhaps permanently, our labor supply? We understand why the boys must be sent to France. We don't see why they and the girls as well must be herded into Eddystone, and Hopewell, Bridgeport and Bethlehem, while we pay taxes to build houses and create costly, temporary towns there."

Foremost among the successes of the war labor recruiting efforts stands the fact that while concentration of war production was the policy, labor could be recruited from other states as far distant as need dictated. It seems safe to say that several important projects were located convenient to transportation and supplies, which could not have been so located unless an interstate system of labor recruiting had been in existence.

Another obvious success of war shifting lies in the closely related movements known commonly as training and dilution. While these subjects are not directly under the supervision of the Employment Service, they are closely connected with its operation. An impetus has been given to the promotion of unskilled and semi-skilled to skilled workers by intensive training that ought to be of permanent value in our industrial development. Now that the provisions of the Smith-Hughes Act make vocational training of our boys and girls a practical and attainable ideal, the shifting of

pupil to worker can be made far more scientific and therefore permanently satisfactory to employer and employe than the old haphazard methods of job finding and of promotion within the plant allowed.

Similarly the scope of women's work and the methods of training her have received impetus. Women have been shifted into an—before the war—unbelievable number of so-called men's occupations, and have in many cases succeeded in learning processes, in keeping up or bettering output records without, so far as present indications show, physical or mental harm in the majority of occupations undertaken. In the metal trades alone, I understand the number of new processes they have taken up runs well over a hundred. How far these women workers can continue to be shifted to more and more highly skilled processes is an unsettled question. The war period was too short to indicate more than success in repetitive, easily learned work in most cases.

Although it is too early to draw any final lesson from shifts of labor during the weeks which have followed the armistice, I cannot refrain from referring briefly to the labor adjustments already made. There was no ministry of reconstruction in this country with a far-reaching program for meeting the emergency. Congress had nothing more definite than a plan for a bipartisan committee yet to be appointed. Even the organized labor element had no definite platform of demands, such as had been prepared and given wide publicity in England. The armistice caught America industrially unprepared for a shift from a war to a peace basis. Notwithstanding this fact, industrial unrest and unemployment have not been evident. There has been no panic.

With these two facts in mind, the lack of an accepted reconstruction program and the absence of the confusion and industrial disturbance which might have been expected to follow the armistice, it seems only wise to credit the agencies which immediately put into action such industrial demobilization machinery as is in use. Two such agencies have been operating. The first is composed of representatives of the United States Employment Service, the War Industries Board, and the production departments of the War, Navy, Shipping Board, and other bureaus which had power to cancel war contracts and indirectly release civilian war workers. These men have been in daily conference. With telegraphic reports from the industrial centers of the country to guide them,

they have held or released contracts in such a way as to stabilize conditions of labor and material shifting.

The other agency also includes the United States Employment Service. Its members represent the morale, personnel and demobilization divisions and the committee on special training of the War Department, the Federal Board of Vocational Training, and the national organizations which have been a part of or have done similar work to the Commission on Training Camp Activities. Agreement has been made to develop throughout the country, wherever any of the agencies has representation, a connection with the United States Employment Service for the return of soldiers and war workers to the industries of their communities however small or remote, and to build a sane strong opinion among employers for their return. The Council of National Defense, in particular, has directed the full force of its machinery, national, state and local, to this end.

The success of these two plans for demobilization which have their center in Washington is dependent upon state and community-organized forces for its development. In each state there is an advisory board to the director of the United States Employment Service made up of representatives of management and labor. In sixteen hundred communities there are similarly constituted community labor boards, locally chosen. Industrial reports on which the War Department and War Industries Board act are telegraphed in from surveys made by these community boards. Community boards are the agencies through which all efforts of local, civic and welfare organizations operate in aiding the return of soldier and war worker to industry. The plan of the United States Employment Service is therefore not paternalistic or compulsory. The machinery of the government is utilized for the development of policies in keeping with national needs and for the clearance of accurate information. Operation of the plans offered and use of the information furnished is a state or local affair. In the first week of operation of the plan of furnishing industrial information more than 90 per cent of the reports were received on time. The trial that has so far been made of the actual demobilization machinery through community boards and coöperating organizations gives promise of very effective work as numbers of the demobilized increase. It gives promise as well of forming the basis for a new and more efficient vehicle for public-spirited action than has hitherto been devised.

The Extension of Selective Tests to Industry

By BEARDSLEY RUMI

THAT modern warfare requires the mobilization of the industries of a nation has become a commonplace of our thinking. Scarcely less familiar is the notion that an army itself is in a very real sense an industrial unit,—industrial in that like industry it must meet and solve problems of fabrication, maintenance, transportation and distribution. Like industry, the army found the solution of these problems to depend to an important degree on the effective utilization of available skilled personnel, and in order that jobs requiring men with special qualifications might be acceptably filled, the army created within itself a body with functions like that of the employment manager of industry, that is, functions of bringing man and job together with due regard to the qualifications of the former and the demands of the latter.

The problem of bringing jobs and men together fell naturally into two main parts, one related to the job, the other to the man. Concerning the job it was necessary to discover just how many men of specific skilled occupations should be distributed to each military unit, and further to state the qualifications that the name of each occupation implied. For example, considerable difference of opinion existed on the duties of a wagoner,—does he make wagons, repair wagons, or does he drive them? The study of army jobs yielded first, the *Tables of Occupational Needs* which specify the skilled complement of military units, and second, the *Trade Specifications and Occupational Index* which describe the qualifications that are implied by army trade names.

Concerning the man, it was necessary to find out his physical, mental, educational and technical qualifications and to make the record of these qualifications instantly available for use. This record which was prepared for practically every man in the army was known as the *Qualification Card*. It is evident that the whole scheme of fitting man to job depended for its success on the accuracy of these records, and consequently some interest attaches to the methods by which the qualification card of each individual

was prepared, and to the ways that similar methods might be used in industrial placement.

In determining the qualifications of men coming into service, the army used the physical examination, the interview, the intelligence test and the trade test. The interview and the physical examination are familiar devices to the employment manager, and so, although there are many points of interest connected with the use of these methods in the army, little more will be said about them here. The intelligence test and the trade test are probably more novel; certainly they have not come into general use as yet in industry.

The army intelligence tests were devised and used by the army so that information concerning each man's mental alertness might be at hand to aid in assigning him to duty. The actual form which the tests took was determined to a large extent by several aspects of the army situation. In the first place the tests had to be given with great speed. It was not uncommon to test and to report on 2,000 men within a space of twenty-four hours in a single camp. In the second place the tests were scored by a staff that was of necessity continually changing. And finally the method of testing had to be so adapted that men who could not speak or read English might be satisfactorily rated.

To meet this situation a system of three tests was in use: first, a test for men who could read English, a test so constructed that it could be given to groups of as many as 500 individuals at one time; second, a test which could be given by the group method to men who could not read English; and third, tests which were given to men individually to establish the fact of mental deficiency or to give a clue to abnormal mental conditions. The individual tests were used primarily for those men who gave an indication of mental defect in the group tests or for men who were sent by commanding officers for special examination.

The group tests were eight-page pamphlets, a test to a page. The tests were so prepared that it was unnecessary for the soldier to write a word during the entire test, the responses consisting entirely of digits, of check-marks, and of underscoring words already printed in the test. The group test for those who could not read English could be administered wholly without the use of language by means of charts and gestures.

As a result of these tests each man received a rating: A for the very superior; B for those decidedly better than the average; C+, C, and C— for those of average ability; D and D— for the inferior; and E for those who did so poorly in the test that arrested mental development was suspected. Whenever mental defect was indicated, confirmation was always sought through individual examination. The letter indicating the class which a man achieved was posted at once to his qualification card, and this information was then used in assigning him to duty in the army.

The ratings of mental alertness were useful in three ways. In the first place they indicated those individuals of such inferior mental ability that their presence in a unit would retard training to a prohibitive degree, men who might even become a menace to the unit in critical situations. Such men were either assigned to routine tasks which they were competent to perform or they were discharged from the army. In the second place, the ratings showed men of superior grade who might be considered for advancement. They pointed out to a commanding officer certain individuals for his special observation, sometimes with startling results. In the third place, the ratings were used to equalize the alert and the sluggish in the companies of a regiment. It was found that if men were assigned to companies in a hit or miss fashion so far as mental ability was concerned, some companies of the regiment could be trained with great speed while the training of others seemed impossible. It was found that these differences were paralleled by differences in the average ratings of the companies, and after shifts in personnel were made which equalized the average intelligence ratings, the training of the regiment as a whole proceeded in a decidedly more satisfactory way.

The intelligence tests have demonstrated their value as an instrument for placing men in the army. On what basis were these men placed? What is the mental trait that the tests measure? A bulletin published authoritatively states that "the rating a man earns furnishes a fairly reliable index of his ability to learn, to think quickly and accurately, to analyse a situation, to maintain a state of mental alertness, and to comprehend and follow instructions." This is what is popularly called mental ability or general intelligence. We may safely say that mental ability is

one of the qualifications that needs to be scrutinized in placing men in the army; and that the army intelligence tests have measured this trait with sufficient accuracy to make them of real military value.

The uses made of intelligence tests in the army suggest that similar tests might be of considerable value to industry. The first use that at once suggests itself is in relation to hiring. Mental alertness is clearly an attribute that brings about success or failure at different kinds of work, and the employment manager who will inform himself of the amount of intelligence that various jobs require can assure himself that each applicant is at least intelligent enough so that he will suffer no handicap in becoming a satisfactory employe because of a slow or retarded mentality. The converse is also true, that applicants of superior intelligence need not be hired for positions in which high mental ability may be either unnecessary or misdirected.

The usefulness of intelligence ratings only begins with the hiring of the applicant; they may be of considerable importance in readjustments in the working force itself. Clearly in slack times when the laying off of groups of men becomes imperative, care might be taken that mental ability in its relation to productivity be given its proper weight in deciding which individuals shall stay and which shall go. In conditions where the manufacture of a new product involving new processes and technical operations is begun, those men on the present force whose mental alertness gives indication of quick adaptability to new work and unfamiliar situations might be selected. When it is desired to select or to encourage certain of the less skilled operators to study in the company's technical schools, better results would be obtained by choosing those whose intelligence rating gives promise of quick learning and an appreciation of the advantages of special training.

The practical applications of intelligence tests so far mentioned are perhaps fairly obvious. A further use, somewhat less certain of immediate value, is suggested from the value of army intelligence tests in balancing the companies of a regiment. Suppose care were taken to keep the various operative units of an industry well balanced, not equally balanced but balanced in the sense that each operative unit consist of individuals of proper intelligence for the job. This means shifting the mentally slow

from positions involving quick judgment, adaptability and mental resourcefulness; it means also removing the mentally alert from work that is of a dull routine nature, unvarying, tedious, calling in no way for the full exercise of the capacities of an intelligent workman. It is conceivable that such balancing would not only be profitable from the point of view of immediate production, but that a major cause for industrial unrest and discontent would be attacked. Certainly the mentally slow derive little but worry and uneasiness from work that lies beyond their power of intellectual adjustment; certainly also the mentally alert feel the futility of jobs that are lacking in creative interest for them.

Great care must be taken to make sure that any intelligence test proposed for use in industry is really able to do the work expected of it. There is danger that inexperienced enthusiasts, wholly unconscious of test technique and test limitations, will offer broadest panaceas for all the difficulties of mental measurement. It should be remembered that the army intelligence tests measure general mental ability, not specific mental traits. It should also be borne in mind that the success of the army tests was due to the great range of mental ability received by the army. Parallel results have never been achieved where tests have been used as a selective agency on a group of relatively small intellectual range. Further, the army tests determined as they were by the fixed conditions of military affairs are probably not the most satisfactory kind of tests for industrial use. It is impossible to go into detail in the discussion of pitfalls;—the purpose here is only to warn the industrial manager who is inclined to see a use for intelligence ratings in his industry that all which savors of dogmatism, inexperience and charlatanism should be avoided in this very difficult phase of employment work. So much for the intelligence tests.

The army trade tests are quite a different story. Among the various items which were recorded on each soldier's qualification card were the very important ones concerning his occupation in civil life and his proficiency in these occupations. The information on these points was at first extracted by means of an interview. It was soon discovered that the interview was unreliable, not hopelessly so by any means, but just unreliable enough to give cause for trying to improve the system. The reason for the in-

accuracy was not lack of training on the part of the interviewer; it was rather the weakness that inheres in the best conducted of interviews. Soldiers, like all men, are unable to judge accurately of their own ability; sheer mendacity was fairly prevalent, especially when there was a tip that this trade or that was required in France; and honest misunderstandings were frequent. An amusing case is that of a carver of Meerschaum pipes who was assigned to work on a sewer at one of the camps. His qualification card showed him to be a "pipe cutter" and he had been classified as a plumber.

Trade tests seemed to be a way of bettering the situation, tests that would check up a man's statement of what his occupations were in civil life and of what he claimed his skill to be. As in the case of the intelligence tests, trade tests had to fit into the army scheme of things. This meant that they had to be given in a short time, not to average more than ten minutes per test, that they be given by examiners who might have no knowledge of the trade whatever, and that they require none of the expensive machinery and equipment that is the complement of most trades. Aside from these requirements imposed by the military situation in which the tests were to be used, it was imperative that the tests give bona fide measures of occupational skill, and that they give these measures in such a way that a journeyman plumber would be rated a journeyman plumber no matter from what part of the country he came or to what camp he happened to have been sent. Uniformity of rating from camp to camp was absolutely essential.

Army trade tests were devised to meet these conditions. Doubt that such tests could be made is frequently expressed by people who know the difficulties of estimating trade ability and of securing uniformity of rating from different examiners. In preparing a test for a trade, the trade was analyzed, not merely to find out the kinds of jobs that are done, but also to discover bits of information that might be peculiar to the trade and to pick up characteristic terminology that might be diagnostically significant. The elements of information, judgment and skill which were discovered by this analysis were then put into a form that could be administered and scored by an examiner, unskilled in the trade but trained to test; they were then tried out on apprentices, journeymen and experts who were actually on the job in industry. Novices were

also examined to make sure that a score could not be made through high intelligence in the absence of trade skill. More than a hundred persons were tested in the preparation of every test. As a result of this try out, the elements which had the highest diagnostic value in detecting trade ability were selected and put in the form of an army trade test. Since each element could be scored, a total score in the test could be found by adding up the points made on the elements. The degree of trade ability could be accurately inferred from the total number of points scored in the test.

Army trade tests have been of value in determining the skill of men professing to be tradesmen. They have indicated technical ability in such a way that uniformity of rating was gained in all the camps where trade tests were used. The trade test rating was the basis for a soldier's assignment to duty requiring specific trade qualifications; it was the basis for choosing which men should be sent from one camp to another to make up shortages of skilled personnel. Entire organizations have been torn to pieces and rebuilt as a result of information gained through trade tests. This was true especially when requisitions calling for skilled men for immediate duty overseas ordered that these men be trade tested before they were sent. The army trade test has thus been successful in its determination of technical qualifications which were to be the basis for military assignment.

Several applications of the trade test method to industry are suggested from its uses in the army. The three phases of employment work that seem most immediately concerned are hiring, transfer and training. Trade tests have an immediate and obvious use in industry in aiding in the selection of new employees. They are the natural method of securing very essential occupational information, of ascertaining whether this particular applicant really has the skill that his age, experience record and last wage seem to indicate. Certainly a direct method of measuring trade ability is to be preferred to an indirect method of inferring it.

Since trade tests can be constructed which will measure proficiency in the various activities that are commonly implied by the name of an occupation, they would be valuable in all matters involving shifts in the working force. A knowledge of each man's strengths and weaknesses within the broad range covered by his

trade would make more intelligent and less uncertain the transfer of particular men to different work. The trade test rating should also be one factor in determining which workers should be retained in dull periods, for the nucleus that is left in the industry after the cut is made is the corner-stone of the new operative unit. It is important to know that from the technical side the stronger elements of the old unit are included in this foundation.

The information that would be given in the trade test record is intimately connected with the educational program of an industry. Isolated weaknesses in the chain of an individual's technical strength may be removed. Furthermore, a systematic program directed to prevent stagnation on the job would give to industry an increasingly flexible and effective working force and would give to the worker the pride in his skill which comes from watching its continuous growth.

A further suggestion comes from the fact that standardized trade tests have been producing uniform ratings of ability for the army, ratings that were equivalent in all parts of the United States. If, through the use of tests, such uniformity of evaluation can be gained from place to place, so also can it be gained from month to month. Trade tests thus offer a means of securing fixed standards of technical proficiency which signify the same thing in December that they did in June. Such standards can be used in specifying definitely the degree of skill required in various positions, and in assuring that employes who are taken on from time to time measure up to this fixed standard. An unchanging scale in terms of which degrees of ability can be stated would also make possible the determination of the sum total ability in the working force of an industry. Such an evaluation of available skill would reduce one of the intangible assets of business to a tangible one, with consequent increase in the significance of all thinking involving this phase of industrial fact.

Again the warning against the amateur must be sounded. Not even the trade tests used so successfully in the army are capable of yielding the results pictured above. Only through experimentation will the ultimate goal be reached. Army trade tests have done their part in pointing out the way which may be followed.

The intelligence tests and the trade tests are part of one technique. Both have for their function the measurement of phases of

human qualifications that are vitally important in the selection of employes, in their assignment to work, in their transfer from department to department, and in further education and training. The intelligence test gives a rating of general mental ability; the trade test gives a rating of specific technical skill. The two together picture an individual's status in those traits which most definitely condition his effectiveness in industry.

In the army, the tests have been used to supply jobs with proper men; the placing of the individual man as such was not and could not be the matter of immediate attention. Yet because of the fact that selection was based on qualifications, on this point the general confidence of the rank and file was achieved. So also in industry a scheme that promotes the utilization of men on work for which they are fitted will result in increased productiveness of the shop and increased contentment of the working force. Intelligence tests and trade tests give promise of becoming methods of considerable importance in our industrial life. The army has accepted the employment methods of industry and has pushed ahead; industry will ultimately receive whatever of this advance proves in practice to be real progress.

War's Challenge to Employment Managers

By JOSEPH H. WILLITS

THE last ten years have witnessed a phenomenal growth in interest on the part of employers in ideas of personnel and the problems connected with personnel work. The war stressed these problems as they never before had been stressed. The assembling and organizing of an army, the development of large munitions plants, the shutting off of the stream of immigrants—these factors alone caused a sudden shifting of workers to new centers; absorbed the surplus labor; and resulted in the barest industrial period America has known since the Civil War, if not before.

Under such conditions, arguments were not needed to direct attention to questions of personnel. That firm which ignored its employes, or which did not appreciate its employes and express that appreciation in concrete substantial ways, simply did not secure the men with which to carry on the work. In most cases it has been the establishment of or the expansion in size and responsibility of the "Employment Department," which has measured the new interest on the part of the plant managers, since it is this department which first and most naturally comes into personal relations with the workers.

The approach of peace has altered somewhat the nature of industry's personnel problems; but it has not diminished the importance in the slightest. Few informed persons will agree with the president of a large shipbuilding company, who, upon the signing of the armistice, declared that there was no longer any serious labor problem as there would soon be two men for every job. Many persons will appreciate the grasp on the real state of affairs shown by a man who is in charge of all manufacturing for a chain of twenty-five plants. He told one of his superintendents that his twenty-five years' experience had indicated to him that the greatest danger to a manufacturer lay in his experience. In other words, he who forms conclusions solely from his own experience has a mind that dwells chiefly in the past; and such a mind has not

the present facts nor farsighted judgments ready enough at his command to meet the new changing difficulties of today.

The chief difficulty with which personnel managers will have to deal after the war arises from the psychological effects of war. Patriotic considerations no longer submerge the individual interest. Individual welfare is again dominant, with aims stronger than pre-war desires partly due to economic changes and partly a reaction to war suppression. This individual objective in industry leads to an even more important element to be considered between employer and employe. The war has stirred up a consciousness on the part of both classes of the different aspects of their relationships. The theoretic status of each may have been very little altered, but the intensity of the beliefs of each class has been deepened.

At one extreme we have the Bourbon employer who holds that the events of war have justified his previous beliefs as to the essential depravity and unreliability of American workmen. He sees evidences that wages have risen rapidly and that output per man has decreased. He assumes that any attempt to improve wages or working conditions will always result in reduced output, and should be frowned upon. He is familiar with a few cases of shiftlessness from which he draws general conclusions. And Russia! Russia is his answer to all arguments. It proves the straits to which we will be subjected if we do not rule with a firm hand untempered by a regard for social theories.

At the other extreme, but really similar in mental attitude, are what may be called the Bourbons of labor. They have become easily acclimated to the destructive nature of war. They believe this gives greater opportunities to the masses and they would keep this element as a tool. Theirs is a demagogic short cut to salvation. This destructive philosophy runs close to the obstructive philosophy of the Bourbon employers.

Fortunately, these noisy groups do not include all employers or all employes. Hope lies in the liberal constructive element in each party. Among employes, this attitude is represented by most of the affiliates of the American Federation of Labor and by the majority of unorganized American workmen. These men recognize that the war has been fought to establish political democracy; and they perceive clearly the logical implications for

industry. But this group needs (or seeks) practical means for coöperation. It recognizes that large production is desirable and that democracy should be obtained without sacrificing efficiency of administration. We have not yet succeeded in combining political efficiency and political democracy, and to this end constructive, coöperative methods of control must be sought.

The corresponding group of liberal employers may, broadly, be said to include those who have sincerely endeavored to give careful, scientific attention to the subject of employment management.

The great majority of American employers and workers and citizens are neither consciously Bourbon nor Liberal. In this fact lies the responsibility and opportunity of the liberals of both classes. If the liberals are able, sound in social theories, sufficiently on their job, they can win this unattached majority to the liberal constructive course. If they do not make progress fast enough, the consequences of an obstructive destructive régime in this country will be upon their shoulders.

In connection with this responsibility, employment managers will be called upon to deal with certain specific situations. Within the next twelve months will be the demobilization and reëmployment of nearly four million soldiers. No great West remains open to absorb them, as it did the soldiers of the Civil War. There will be the shifting in employment of perhaps twice as many munitions workers. It is no great reflection against the United States Employment Service to say that it will not be able to handle the task. But if all the employment departments in the country which are laying off people would constitute themselves temporarily into branches of the government service, unemployment and its hardships would be considerably lessened.

But this is simply one of the post-war problems of employment management. For instance, I do not know of any time when it has been more essential to retain personal relations. No plant should say that it is too big for its employment department to maintain personal contacts; for it is vitally important in view of the problems ahead that this contact between liberals should be held. There is the unquestioned fact to face that the individual output of many workers has been lessened by psychological causes during the war.

It is idle to attempt to catalog post-war personnel problems.

It may be taken for granted that with the impetus personnel interest has assumed in industry, most of these questions will be faced as a routine part of good competitive business by most enlightened concerns.

The real challenge of the reconstructive period is the extent to which employers can appreciate and act upon the logical industrial implications of the war. The war has taught that excessive authority cannot safely be left in the hands of any one group. In industry, it is not enough to say that ultimately bad owners and managers who hold their position through inheritance or undeserved influence will be crowded to the wall; and that only the real leaders with positions based on service rendered will remain. The process takes too long. In the absence of fair inheritance taxes and without a radical change in human nature, such unresponsive managements will persist. Therefore, the problem of enlightened personnel management now is to utilize forms and devices and safeguards of coöperation and control which will insure democracy, and at the same time not interfere with the necessities of competitive industries. Wages, the status of the worker, continuity of employment, working conditions, and social life of the workers, and the disposition of "surplus profits" are the subjects in which the worker has a legitimate interest in the working out of which he must have a share. To the extent to which liberal management successfully combines with liberal employes in arriving at mutually satisfactory forms for the carrying out of the above purposes, to just that extent will the neutral body of opinion be drawn to the liberal and constructive program—away from the destruction and obstruction program.

Housing and Transportation Problems in Relation to Labor Placement

By JOHN HILDER

ONE of our national weeklies, in an interpretive account of the reconstruction conference held by the United States Chamber of Commerce at Atlantic City in December, 1918, found the basic reason for the liberal attitude of the thousands of employers there assembled a fear of labor. This did not mean that employers have not reached their present attitude of mind by way of enlightened self-interest, that there has not been a leaven of genuine altruism to hasten their rising. Nor does it leave out of account that the employer is unconsciously going with a great tide in human affairs. After the French revolution the tide of interest in community affairs, in the affairs of our neighbors, ran out. Decade after decade we became more and more convinced that the salvation of the world lay in individualism. The less government the better government; the poor are the victims of vices for which they individually are responsible; the employer's responsibility ceases at the factory gates. So the tide kept running out until it left bare the ill-smelling mud flats of our slum areas, and all that those areas typify. Then slowly the tide began to turn. Even the most successful individuals could not continue to believe absolutely in individualism when its bad effects became so manifest. So they founded associations for the improvement of the condition of the poor. The roots of nearly all our great social organizations run back to that time of benignant lords and ladies bountiful before the middle of the last century when, despite his convictions, man was beginning to see that he could not be saved by individualism alone. Then appeared in England, where individualism had been most loudly hailed, Charles Dickens, whose novels were social tracts sugar coated; Octavia Hill, leader in the early days of the charity organization and the housing movements; and various "good" lords of high degree who sponsored social legislation of a tentative kind—the nobility responded more rapidly than the wealthy bourgeoisie. Then appeared also Karl Marx, whose methods were different. But

whatever their ideas, all had their part in turning the tide which today is running strong toward community interest and community control. Whether they would or not the employers at Atlantic City must have been borne along by it, but their reason, their self-interest or their fear, will cause them to make better progress by swimming than they would by floating.

It is this world-wide tide of community interest, strong enough even to affect the conduct of the great war, overcome national prejudice, and perhaps make possible a league of free nations, that is leading us to study such things as housing and transportation problems in relation to labor placement. A few years ago such a study would have been deemed theoretical by practical minds which believed implicitly in an unalterable and unmodifiable law of supply and demand; which saw, without seeing, the banks of rivers turned into dump heaps and sources of municipal water supply polluted; which accepted without question the blighting of a city's most accessible and useable areas and spent millions of dollars on needlessly expensive and often needless systems of transportation, merely because they had not been trained to see a community as a community but only as an aggregation of individuals.

The broad outlines of the question dealt with by this paper may be stated briefly. The details would fill volumes, and but little has yet been assembled in useable form. Labor placement, we shall assume, includes labor retention, i.e., not only the securing of a supply of labor but what is more important, the reducing of its turnover. The latter part of the question has been under scrutiny for some time and many obvious reasons for our great labor turnover have been noted and some have been changed. As in infant mortality, even a superficial study brought to light certain conditions that a minimum of group or community action could change—as the substitution of clean and modified milk for the dirty, diluted stuff that had been sold before—and which being changed caused an immediate and notable improvement.

So easy and so efficacious, comparatively, are these first changes that some of us have been inclined to persuade ourselves that they comprise our whole task. An alley that has been buried under an accumulation of filth is vastly improved by shovel work, but it is not really clean until broom and water have played their part.

So improvements within the plant, whether of physical conditions or of management, will make notable improvement in labor turnover and at a comparatively small expenditure of thought and energy, for they require but a minimum of community or group action.

But having achieved so much we find that the task is not completed. A generation ago our present condition, in our more progressive industrial enterprises at least, would have seemed almost utopian. But having done so much we find that labor turnover is not yet reduced to the place where it should be and dimly we are beginning to see that labor turnover is a matter of concern not only to individual employers but to those who are concerned with such community problems as deserting husbands; and that conversely the employer has reason to be concerned, because of his interest in the efficiency of his own plant, in these community problems. The deserting husband not only leaves destitute wife and children for the community to support but he loses the spirit which makes a first class workman and by degrees becomes a drifter, a vagrant, one of the army of unemployables the attempt to employ whom is one of the great wastes of industry. And the reason for desertion in the great majority of cases probably lies quite outside the factory gates and only the effect is felt inside.

Had that man lived in a better home, in a better neighborhood, had his children attended better schools, had his neighbors been more satisfied with their lot, had more to lose and so have had a different tone in their daily conversation, the deserter would probably have resisted the temptation to which he yielded, perhaps a little thing in itself, but the last of many things big and little,—impatience at the jam in an overcrowded street car to which he was subjected morning and evening, or, of more consequence, remorse that the cost of sociability at the corner saloon made impossible the paying of grocer's bills. These cannot be affected by improvement within the plant; they can be affected only by improvement of living conditions, and the latter may be summarized as improvement of the dwelling.

But here again it is necessary for us to broaden our vision from the individual to the community. Housing betterment began by attempts to improve individual houses, and it made considerable improvement. It did the shovel work—or at least began it—

of somewhat lessening the squalor and filth of slum areas. Transportation began too by accepting existing conditions and seeking only to mitigate them by enabling those who had the time and the money to escape to a better environment. But having done the shovel work where it has been done, we learned that it was after all but superficial, that it must be done over and over again, for it makes no change in the basic conditions which first rendered it necessary. Instead of improved slums, instead of expensive and wasteful means of escape, we begin to realize that there will be economy in abolishing slums, in using transportation not to mitigate the effects of bad conditions but to serve the community as a community. Transportation, even the least expensive forms, is wasteful if used needlessly, wasteful in time, health, money. The more expensive forms, especially the most expensive form, the subway, is ruinous if used as a substitute for walking or even for trolleys.

So both housing and transportation lead us inevitably to city planning, and city planning is based upon two things: first, the needs of business and industry, which create the city; second, upon the needs of the home, which make the city worth creating. Having come then to visualize the city as an entity, not as a mere aggregation of individuals, we are able to consider the proper distribution of its parts and to plan for their needs.

Business and industry must first be considered because from them flows the wealth upon which all else depends. Those areas best suited to their needs should be devoted to them. Transportation, here including not only passenger but goods transportation, must be planned to serve them primarily. But, though they are considered first, they cannot be considered exclusively; the satisfying of their needs may have to be modified if it takes too much from satisfying the living needs of those for whose benefit business and industry exist.

The living needs of the people may come second in order of consideration, but not in importance. These living needs fundamentally are first, a wholesome environment, which means not only a sanitary dwelling—to that point we have already progressed in some of our cities—but space for outdoor life, opportunity for education and recreation, amenities that promoted sense of community well-being and second, accessibility to the places of employment which support all this. That is, our places of em-

ployment must be distributed in such a way that their business needs may be most economically met and at the same time that they may be accessible to those who operate them.

Philadelphia, by happenstance, for it was only a matter of happening, not of conscious planning, illustrates in a rough and unordered way what in the future we shall do in a systematic way. Its industries are distributed in many centers and as a consequence its workers in unusually large proportion can live within walking distance of their work. As further consequences its workers in very unusually large proportion live in single family houses, and its transportation system has lagged behind those of competitor cities in mechanical development. Had Philadelphia, instead of drifting along from a fortuitously good start, been consciously planned and developed according to ideas only now coming into vogue, it would today be a model for other cities to imitate. The fundamentals are there, though long unrecognized; the failure has come in working out details. Now that the fundamentals are being recognized, though not always clearly, and now that the tide is running strong toward community development and control, Philadelphia has the best opportunity of any of our largest cities to develop its housing and its transportation in such a way as to attract labor and to reduce labor turnover.

In its new and rapidly growing industrial areas outside the present city it can develop a transportation system designed to meet real needs, not those due to mal-adjustment, and consequently a productive system, not a wasteful one. In these areas there is still space to develop the kind of housing that will make the worker glad to come and loath to leave. And while it is doing this it may, if the tide runs strong enough or if its leading citizens swim hard enough, gradually correct the worst faults of its present housing—land overcrowding and insanitary conditions, and modify its plans for transportation so that they will not only bring it increased business from outside, but will make passenger transit within its borders efficient and economical—high-speed trunk lines connecting important centers and fed by less expensive local lines. For passenger transportation within a city should be only for those who must travel long distances, and the number who must travel long distances daily should be reduced to a minimum by building as large a proportion as possible of houses within walking distance of places of employment.

A National Policy—Public Works to Stabilize Employment

By OTTO T. MALLERY

DURING the war period large amounts of necessary public works have been deferred on account of lack of material, labor and capital. The War Industries Board has diverted the material needed; the draft and munitions plants have taken the labor; and the Capital Issues Committee has prevented the raising of the capital. Thus the war forced the adoption of the excellent policy recommended for peace times but never adopted—the policy of doing less public work during periods of great industrial activity and of speeding up the construction of public works during periods of general unemployment. Now comes the time to carry out the second half of this policy.

In ordinary years of peace the amount of public money spent in the United States on public works is prodigious. It comes to \$600,000,000 a year. Suppose that we should adopt the policy of spending nine-tenths of this and of putting the remaining one-tenth each year into a reserve for a bad year of unemployment.¹ We would at the end of five years have a sum that would employ 800,000 workers in a bad year of unemployment at average wages for a period of three months. As two-thirds of the whole sum expended for public works in the United States is by the governments of cities, these 800,000 workers would be employed in every part of the country and the larger groups in the industrial cities where unemployment is ordinarily most acute. This would be a peace order quite worthy to be compared with any of our great war orders.²

In effect the war has given the United States this reserve of usual, necessary public works undone, although of course no reserve of capital with which to do it. It is a safe estimate that the amount of public works deferred during the war period of 1917 and

¹ Periods of industrial depression and unemployment have occurred on the average once in ten years in the United States since 1850.

² For the best presentation of this subject see "Big Jobs for Bad Times," by William Hard, *Everybody's Magazine*, August, 1916, from which the above figures are derived.

1918, plus the ordinary new public works for 1919, would employ 2,400,000 workers for three months at average wages.¹

Clearly the execution of all this public work in 1919 would have an important stabilizing effect upon unemployment and would ease the process of demobilization and the transition of the workers from war to peace industries. The employment provided by these public works is not only employment to the workers directly engaged upon them but also employment to those needed in producing the materials for the work. In addition the purchasing power of the workers directly employed indirectly creates employment for other workers who produce the things for which the wages of the first group are spent. This initial impulse of setting a group of unemployed men to work has the same effect as dropping a pebble into a pond. The ripples it starts extend farther than the eye can see and the circles of motion widen and move in all directions to the farthest shores.

The use of public works as a stabilizing force is about to be put into practice for the first time. The War Labor Policies Board, of the Department of Labor, has approved such a policy and is at work developing it. Suggestions have been made to the cities to go ahead with their deferred and necessary public works. The cost, time and number of men needed will soon be known to the War Labor Policies Board and the United States Employment Service. The plans of the state governments for public works are also being assembled and studied by the War Labor Policies Board. All this information will be in the hands of the War Department for such use as it may decide to make of it in its plans for military demobilization.

The state of Pennsylvania is a pioneer in this undertaking. A few months after the United States entered the war the legislature of Pennsylvania passed an act creating an Emergency Public Works Fund and an Emergency Public Works Commission to administer it. The commission is now gathering information from all departments of the Pennsylvania state government concerning the necessary public works which the state might undertake during periods of unemployment and industrial depression. The legisla-

¹ These figures are based on a safe assumption that only 25 per cent of the usual public works were deferred in 1917 and 1918 on account of war conditions and that the amount of new public works for 1919 would be no larger than the pre-war annual average.

ture appropriated a small sum to the Emergency Public Works Fund as a beginning. The expectation was clearly that this fund should be increased by each succeeding legislature and allowed to accumulate until the next great period of unemployment.¹ A recent amendment to the constitution of Pennsylvania permits the state to borrow \$50,000,000 for roads. This gives Pennsylvania a chance to do an important part of this work during the critical period of transition.

Bills similar to the Pennsylvania act are in preparation for introduction into the legislatures of several states in 1919. Special appropriations and bond issues will also be sought in some of these states and public works stimulated in 1919.

The Ministry of Reconstruction of Great Britain has pointed out the urgent need of public works to ease demobilization and the transition from war to peace. In Great Britain the percentage of men under arms to the total population is at least three times as great as the percentage in the United States, and the undertaking correspondingly more complex and dangerous to order and political stability. Plans have apparently been made for the payment of wages to munitions workers for a period following their discharge and also for the payment of a similar allowance to ex-soldiers. What federal public works will be undertaken direct by the various branches of the federal government during the transition period has not yet been determined. (November 20, 1918.)

The Department of Interior is well advanced upon its plans for creating ready made farms to be sold to returned soldiers. Ellwood Mead, who developed a similar project successfully for the state of California, is directing this work. Secretary of Interior Lane is ready to employ 100,000 men at once upon United States reclamation and irrigation projects already planned and surveyed if Congress gives the signal and necessary appropriations. In 1919 the Department of Interior could employ 500,000 men upon a great plan to reclaim cutover and swamp lands and upon the development of new irrigation projects. This plan aims to increase the arable area of the United States by 250,000,000 acres and provide homes for 20,000,000 people.

The area to be reclaimed would increase by one-half the present

¹ A brief summary of the Pennsylvania Emergency Public Works Act will be found in the Appendix to this article.

improved farm land of the United States. This amounts to a peaceful conquest of thirty countries the size of Belgium or the admission of eight new Pennsylvanias into the Union. To what extent this plan, or portions of it, will be undertaken depends upon Congressional enactments.

The Highway Transportation Committee of the Council of National Defense is preparing legislation asking \$100,000,000 of federal appropriations for highway construction. Federal direction and assistance in improving the harbors of New York, Philadelphia and other ports will probably be asked.

Flood prevention offers a large field for federal activity in co-operation with the states. The engineers of the War Department have studied the prevention of destructive floods in the Ohio River basin, like those which wrecked Dayton, Ohio, in 1913. The cost of this vast undertaking is colossal, but so is the certain damage to life and property if unbridled floods are allowed to sweep on. The lower Mississippi and Miami Rivers, the Pittsburgh and other flood districts need federal and state assistance in flood prevention. The rivers of France and western Europe generally have long since been tamed and deprived of their power of destruction. The same must be done with our North American rivers and the time to undertake these great tasks is clearly during periods of unemployment. The fact that the cost of materials is lower then than in periods of greater industrial activity is an additional reason.

Shipbuilding may now be regarded as a part of public works, and one which will need more workers during the transition period than it was able to secure during the war, even after it had attempted to outbid all other industries by unprecedented wages.

The Railroad Administration will probably not undertake any important additions or improvements unless a change is made in the contract of the government with the railroads as to the clause reading: . . . "the roads shall be returned to their owners in as good condition as when received." Under this clause the government would presumably not be compensated for any railroad extensions or additions it might make.

The limits to which necessary public works can safely be undertaken during the transition period are:

1. The amount of capital that may be raised by municipal.

state and federal governments without depriving private industry of the capital it also requires for equally essential enterprises.

2. The amount of materials available without depriving equally essential private industries.

3. Plans for these great undertakings in public works, especially those of the federal government, like reclamation and flood prevention, should be in readiness, but the whole program should not be put into operation unless the need is clear. Therefore Congressional authorizations should allow some discretion as to whether, when and to what extent the particular public works in question shall be undertaken.

Even though the public works of the United States annually amount to the great sum already noted, they are but a small percentage of the private industry and trade of the United States. Therefore if private industry were to be checked for a long period the greatest conceivable program of public works could not restore the balance. While private industries non-essential to war were reduced in war time to a mere shadow of their former selves, the vast aggregate of government war work more than offset this reduction. In peace times public works can never be on so vast a scale as were the governmental undertakings of war time, but neither will the suspension of private industry be as complete as in war time.

Public works is a good sponge to absorb workers spilled over by some sudden shock. Public works may absorb enough workers to prevent a serious flood and resultant wreckage and suffering. As buffer employment public works at the right time and in the right amount will oil the starting up of the peace machinery, but it will not provide the steam to keep the machine going.

The federal government is awake to the value of public works during the period of demobilization. To effect this great change with the least shock and suffering, the cities and states, under guidance from the War and Labor Departments, have a great responsibility and a greater opportunity.

APPENDIX—SUMMARY OF THE PENNSYLVANIA EMERGENCY PUBLIC WORKS ACT, SENATE BILL 1065, 1917

PURPOSE OF THE ACT

1. To provide for the extension of the public works of the state during periods of extraordinary unemployment.
2. To provide a fund for the purpose to be known as the Emergency Public Works Fund.
3. To create the Emergency Public Works Commission as trustees and custodians of the fund.

PROVISION OF THE ACT

The Emergency Public Works Commission shall consist of the Governor, the State Treasurer, the Auditor General and the Commissioner of Labor.

It shall be the duty of the Emergency Public Works Commission to proceed forthwith to secure from the various departments, bureaus, boards and commissions of the state, tentative plans for such extension of the necessary public works of the state as shall be best adapted to supply increased opportunities for advantageous public labor during such periods of temporary unemployment together with estimates of the amount, character and duration of said employment, the number of employees who could be profitably used therein together with rates of wages, etc.

It shall be the duty of the Emergency Public Works Commission, when in its opinion a period of extraordinary unemployment does in fact exist within the state, to make such disposition and distribution of the Emergency Public Works Fund among the several departments of the state for such extension of the public works of the state under the charge or direction of the state as the Emergency Public Works Commission may approve.

APPROPRIATIONS FOR EMERGENCY PUBLIC WORKS

The sum of \$40,000 is hereby appropriated to the Emergency Public Works Commission for the purposes of this act. (This sum should not lapse if unexpended, but with succeeding regular appropriations should be allowed to accumulate in the Emergency Public Works Fund, the purpose being to accumulate money during prosperous years for expenditure during periods of unemployment and industrial depression.)

Placing Soldiers on Farm Colonies

By ELWOOD MEAD

THERE is reason to hope that one of the results of the war will be a carefully thought out, social land-settlement policy. This is something the nation has long needed but never enjoyed. Although there has been administered from Washington the greatest area of fertile land ever controlled under one civil polity there has never been any attempt on the part of the government to plan in advance the development of any particular area so as to create an agriculture that would maintain or increase the fertility of the soil, that would regard the farm as not solely a place to make money, but the means of a healthy, independent existence and the center of family life. There has been no attempt to select colonists so that they would be harmonious or agreeable members of the rural community or effective agents in rural development. There has been no attempt to fix the size of farms so that they would have a definite relation to the ability of the settler to cultivate them properly or to the income needed to give a comfortable support to a family.

The social and economic importance of having land owned by its cultivators and of having such restriction on tenure as would prevent land monopoly was not realized. As a nation we have acted on the idea that anyone who was strong enough and shrewd enough to own the earth was privileged to do so. In our early history, land was sold chiefly to the speculators. Later on it was given away mainly to corporations and to states, and the corporation and the state alike paid little attention to the kind of agriculture or the rural society which an unthinking disposal of these lands to private owners might create. Men who bought lands from railroads and from states did not, as a rule, buy with the idea of becoming farmers or of creating an enduring kind of agriculture. They usually bought to sell again at a profit, and from 1870 until near the close of the nineteenth century we had in this country the unfortunate spectacle of the federal government unable to prevent wholesale frauds under the Homestead and Desert-Land Acts, and the railroad, the state and the private speculator

selling land under conditions of development fixed mainly by the speculative colonization agent.

This review of our past shortsighted carelessness is indulged in primarily to show how great would be the change if in place of this the experience and wisdom of our ablest minds were enlisted in an effort to plan rural development in advance, to think out what an agricultural community needs, what obstacles will confront the man of limited capital who seeks to achieve landed independence, and what can be done to help him overcome them.

Such a planned land-settlement policy should be put in operation at once if the nation meets adequately the situation now upon it. Over a million soldiers were drawn from rural pursuits. An equal number should be returned. The argument for this is that an increase in farm products will meet an urgent national need. Before the war, this country had begun to realize that something should be done to insure a more abundant and cheaper food supply. We were importing butter from Australia, meat from Argentina, sugar from many countries. There was no shortage but there was increasing difficulty on the part of wage-earners in providing their children with an adequate amount of wholesome, nourishing food, the things the citizens of the future should have.

The end of the war finds the cost of food so increased as to be a serious menace to industrial progress and political stability. The milk riots of cities and the declaration of the Food Administration that price control of foods should continue for several years are two of many indications. Every European country feels the pinch of hunger and some are menaced by famine. Not only have the world's available stores of food been exhausted but Europe looks to this country to increase production to meet its people's needs and this is causing the fertility of farm lands to be depleted at a rapid rate by overcropping.

More farms and more attractive and better-organized rural life are therefore among the nation's foremost economic requirements. Only those who have studied the conditions of rural life in this country in recent years fully realize the political and economic value of soldier settlements created under carefully thought out plans. Such settlements will give to some sections of the country an agriculture and a democratic rural life they have thus far lacked. A journey from New York to Atlanta, Ga., through

the Piedmont area, with its succession of abandoned fields and destructive methods of tillage, shows that we are to have a rude awakening unless there is a complete reform in our agricultural practices. One century has done more to impoverish the soil in this region than a thousand years of intensive cultivation on the farms of Europe.

We have slashed away our splendid wealth of forests. We have planted hillsides to cultivated crops with no binding material in their roots, and winter rains have washed off the stored-up fertility of centuries and left them scarred with gullies, with many fields which now grow only weeds and brush. Instead of the land being owned by its cultivators, we have a menacing increase in the area farmed by tenants. Formerly indifferent to land tenure, we are now beginning to realize, as yet vaguely and uncertainly, that if we are to be a real economic democracy we cannot tolerate land monopoly nor allow this nation to become a revolutionary Russia through the growth of non-resident ownership and tenant cultivation of land.

It is a happy coincidence, therefore, that the open, healthful life of the farm is what a large percentage of the returning soldiers will desire. This has been shown by the demand for farms by the soldiers of Australia who have been invalided home, and by the inquiry by soldiers now in the American Army for farms under the land settlement act of California.

Two years ago the legislature of that state created a state land settlement board and authorized the purchase, subdivision and improvement of 10,000 acres of land and its sale in small, ready-made farms to settlers. It was not a war measure but was intended to be a demonstration of what could be done through government aid and direction to create broader opportunities for poor men.

The first lands purchased under this act were settled last June. Fathers of four soldiers in our army applied for farms for their sons. These were granted. Another tract of land will be settled in November. One father writes: "I have three sons fighting in France. They all want to be farmers. Isn't there some way by which I can apply for one farm for myself and another for my oldest boy? The four of us will then work the two farms together." Soldiers have written asking if they could register as

applicants, and, if it had been legally possible to give them preference, not a single farm would go to a civilian. There are tens of thousands of such young men in the American Army.

It means much for the success of the soldiers' settlement proposed that our young men abroad have been living for the past year in countries which are not only examples of the best kind of agriculture, but where the ownership of a farm has back of it tradition and sentiment that thus far rural life in this country has lacked. The farm home of France is the altar of the family life. Love for the soil by the French and Belgian farmer is the main-spring of his love of country. Fresh from these impressions, these young men will be ideal material to build up a new and better rural life in this country, to help end our speculative and migratory development and create communities that will be reservoirs of patriotism and new sources of national strength.

THE NATION AND STATE SHOULD COÖPERATE

Assuming that we will follow the example of the other Allied countries and create opportunities for ex-soldiers to obtain homes in the country, there arises at once the question as to whether the state governments or Congress shall direct the undertaking. Thus far, it has been considered mainly as a national matter, the movement having been inaugurated and national interest therein aroused and maintained chiefly through the influence and efforts of Secretary Lane.

The great extent of this country, the wide variation in the soils, climate and productions, and the different ideas and habits of the people seem to make it desirable that both the national and state governments should take part in the movement. This plan has been adopted in several English-speaking countries.

Another reason for state participation is that it can provide the land and be a responsible partner in this movement with a small appropriation of money. Visits to many states have shown that where it is not possible to secure an appropriation of money to buy land, the owners will turn their property over to the state under a contract which permits of its sale to settlers, the owners of the land to be paid from the settlers' payments. The California Land Settlement Board is offered all the land that it cares to colonize on these terms, and there was not back of these offers

the inspiration of patriotism which attaches to the soldier-settlement movement, nor does the federal government in any way assist in the improvement of the land as it will in the soldier-settlement movement.

In Australia the commonwealth government provides the money for developing and improving farms; the different states provide the land. In Canada both the dominion and the states provide land and money. In Ireland the empire provides the money, but the success of Irish land settlement never would have been complete had it not been for the intimate, patient assistance to settlers furnished by the Agricultural Organization Society.

Legislation in Congress should be of such a character that any state could enjoy whatever assistance the federal government extends, provided that the state itself is willing to assume a proper share of the cost and of responsibility for results.

The greater part of the land to be used in settlement is in private ownership. Here is the field for state action. The state should provide the land, both the price and quality of the land to be approved by the federal authorities. The federal government should, however, prepare the land for settlement.

The largest fields for settlement are the neglected lands of the Eastern and South Atlantic States, the logged-off lands, the swamp lands of the South and West, and the arid lands of the West. Here, development can take place without disturbing existing cultivators. But before this is possible there must be a large expenditure in development. This work should be carried out by the federal government because the United States Reclamation Service is already organized, has behind it a 15-years' record of successful achievement, and has the facts and the expert staff needed to begin work promptly and carry it to successful completion.

The two foundations of the system should be, therefore, that the state provide land, approved by the federal authorities, and the reclamation service should prepare the land for settlement.

CAPITAL A SOLDIER SHOULD HAVE

It will be a serious mistake to give this opportunity to all soldiers. Those who have not had experience ought to go through a course of training to know whether they like farm life and to

determine whether they are fitted to succeed. It is no kindness to the individual to let him undertake something in which failure is probable. Every settler who takes a farm should have some capital. This should be required as a protection against overconfidence and inexperience. There ought to be a part of the expenditure on which the settler does not have to pay interest. There ought to be some reserve on which he can fall back in case of illness or misfortune. Such a rule is necessary to the solvency of the undertaking. If farms were thrown open indiscriminately to settlers without capital, men with no seriousness of purpose and no real interest in agriculture would be willing to take a fling because it costs nothing, and they would be equally willing to abandon the enterprise for some trivial cause. In the interest of the community such men should be excluded. It demoralizes workers to have among them people who lack seriousness of purpose, and it does not look well to have any large percentage of the farms abandoned.

The requirement that a settler should have some capital does not necessarily mean his exclusion from the benefits of this act. If the amount of capital required is only 10 per cent of the total cost of the farm, an equipped farm costing \$5,000 will require only \$500 capital, or, if the settler chooses to begin as a farm worker, he can obtain a home which will be his own, with a comfortable house, at an outlay not to exceed \$2,000, and there his initial capital would only have to be \$200, and this sum of money can be readily earned and saved through the opportunities for employment in farm development which will be afforded.

In the California State Land Settlement, the minimum capital of the settler is \$1,500. That condition has not caused the rejection of a single individual who was a safe risk, and there are young men having farms in that settlement who have accumulated the capital within four years. As the California farms vary in value from about \$6,000 to \$15,000, and the cost of their improvements and equipment will amount to \$5,000 more, the \$1,500 is only about ten per cent of the cost of the completed farm, and this percentage of the total cost is about the minimum capital which should be required on the soldier settlements of this country. If an improved farm costs \$5,000, the settler should have \$500. If it costs \$10,000, his capital should be \$1,000 and if, in both cases, he has three times the sum named, so much the better.

Conversations with men vitally interested in this movement and who desire to see the policy adopted show a wide difference in views regarding the authority which should direct the settlers, look after the development of colonies, and collect the money required to pay for the land and improvements. This difference in view is mainly sectional. In the South the prevailing wish is that the federal government should perform this task. In the North and West, and especially in those states where the agricultural colleges are well equipped and progressive, the state board is advocated. This is a curious reversal of the former attitude of these two sections regarding state's rights. The law should be drawn so as to give the states that desire to assume this responsibility, opportunity to do so but, where the state is reluctant, the federal government should direct the entire development. It is my belief, however, that a competent state board would perform this task better than a competent federal board. It will have, back of its action, state pride in the success of the development, a knowledge of local conditions which will show in the numerous intimate and friendly things which help to keep hope and courage in the heart of the settler when all of his cash capital is spent and the outlay for living expenses, improvements and equipment seems unending. Ultimately this plan of rural development is to be the rule rather than the exception if the rural civilization of this country is to keep pace with that of other nations which have made government aid and direction in land settlement a definite public policy. The state that manages a soldier settlement will gain an experience which will show in its progress in future years.

The function of the federal government is to give to this movement unity and general direction, to provide the money and expert organization for the preparatory period, and to give a broader outlook and such oversight in the later stages as to prevent experiments or extravagance on the part of state boards. But the state should be the directing agent in developing settlements and in collecting payments.

SETTLEMENTS SHOULD BE RESTRICTED TO AREAS LARGE ENOUGH TO GIVE DISTINCT COMMUNITY LIFE

The experience of other countries has been that attempts to finance individual settlers on farms scattered throughout rural

communities have been failures. The overhead expenses of management after settlement are too great. Economy and efficiency require that there be at least one hundred farms in each community. It needs that many to create a real community spirit, to provide for coöperative buying and selling organizations, to establish any definite kind of agriculture, and to create a morale needed to bring the undertaking to a successful end.

The task of improving and paying for a farm is not an easy one even under the generous terms which the government may provide. Industry and self-denial extending over several years are certain to be required. Settlers will be more ready to work hard and live simply if they have neighbors who are doing the same thing, but a single family, placed in a community of well-to-do, easy-going farmers with their farms paid for, will certainly adopt the methods and habits of the neighborhood, and a large percentage will fail. The English commissions reported that no farm community should have less than 2,500 acres. That means twenty-five 100-acre farms, and no garden area should have less than 1,000 acres, which also means homes for one hundred families.

HOMES FOR FARM LABORERS

Every soldier settlement ought to contain whatever the community needs. It ought to have a common meeting place, a social hall, and, if large enough, there ought to be schools to give vocational training in agriculture. The best-planned European settlements provide the store, church, blacksmith shop, carpenter shop, and usually a social hall and recreation common. In other words, they recognize the need for a varied industrial life. The same plan ought to be followed in this country.

Some of the settlers will want to be fruit growers, some poultry raisers, some market gardeners, and some will not want the responsibility of ownership and management of a farm but will want to work for wages. The careful, experienced, skillful farm worker is an essential need of agricultural life. He is just as valuable as the farm owner, and failure to recognize this fact and make an opportunity for him and his family to live as American citizens should live has been the cause of the migration to the cities of many families who would, under proper conditions, rather live in

the country. In some sections of the United States the American farm laborer has almost disappeared. His place has been taken by immigrants from Southern Europe and Asiatic countries, men with low standards of living and indifferent to their status as citizens or to their social position. If these soldier settlements are to be really democratic all this must be changed. Homes must be provided for the wage-workers which will be as attractive and comfortable as those for the families of the landowners, although they may, and doubtless will, cost less. They should be homes where the children can grow up under conditions of independence and self-respect which ought to be a heritage of every American citizen.

The most valuable feature of the California land settlement is the two-acre farm laborer's allotment. This is enough land to give a garden, enable the family to keep a cow, some chickens and pigs, and to have their own fruit. Such homes enable these families to live cheaply because they grow most of the things they eat. The farm worker's home is also a valuable feature of the land-settlement schemes of Denmark, of Germany, and of Australia.

Nothing is more instructive than a study of the qualifications of the men who secured the twenty-one farm laborers' allotments on the first California settlement. There are five carpenters, a shoemaker, and two skilled market gardeners. The others are men who understand farm life and farm work, are sober, industrious, clean-living men. One has a capital of \$4,700 well invested. He could have bought a farm, but he has been working and saving as a farm laborer for more than twenty years and he had no desire to assume the risks and responsibilities of ownership. The farm laborers in this community belong to the coöperative buying and selling associations. They attend and participate in the meetings which consider the things that the community is to do for its common welfare. It is a restoration to our rural life of the old New England town meeting, the thing that, as much as any single influence, gives capacity for self-government. The only capital required of the farm laborer is money enough to meet the initial payment on his land and house. He can pay the rest out of his savings because the amount involved is far less than that required to pay rent in a town.

THE NEED FOR LONG-TIME PAYMENTS AND LOW INTEREST RATES

The chief reason for the rapid growth of tenantry in recent years is that the rising price of land made it impossible for poor men to pay for farms in the time which private owners were willing to give. The money could not be earned out of the soil. This mistake must not be repeated in soldier settlements. The time of payment ought to be long enough to enable the settler to meet his payments without undue anxiety, risk or privation. In this country the usual time for farm payments has been five years and rarely longer than ten years. In Denmark, under state land settlement acts, it is from 50 to 75 years; in Germany, 50 years; in Ireland, 68 years; in Australia, 31 to 36 years; in California, 40 years; and the commission on soldier settlement in England recommends that 60 years be the payment period there.

If the interest rate in America be made 5 per cent and the payments are amortized, a yearly payment of 6 per cent on the cost will pay for the farm in 36 years; 8 per cent a year will pay off the debt in 20 years. The difference between 6 per cent and 8 per cent, in the case of some struggling settler, may mean the difference between being able to keep up with his obligations and falling behind with them, hence the payment period ought to be not less than 20 years, and 36 years would, in some cases, be preferable.

WORKING OUT SETTLEMENT PLANS

The conditions under which settlers are given farms must vary greatly in the several states. The methods of development will also vary in different sections. The plan of operation on the neglected farms of the Atlantic states, on the great unsettled areas of the South Atlantic and Gulf seaboard, and on the arid lands of the West, must be entirely different. Our success is going to depend in large measure on the intelligence which we show in adjusting methods to conditions.

On much of the neglected or abandoned farm areas I have visited, the best plan would be to put the settler on his farm. Say to him that it is going to take two or three years to clear the land, bring the soil into condition to produce crops, and that no payment will be required during that time. On the contrary, that he will be paid for every acre properly cleared, for every rod

of fence built, and for the fertilizing and manuring of the worn-out lands; that he will be helped in the erection of farm buildings, and when the preparatory part is over, the money advanced to pay for these improvements will be added to the cost of the farm, and the settler will then begin paying for an improved property.

In the logged-off land and in areas needing irrigation and drainage an entirely different plan must be followed. Settlers should not be allotted farms on these lands until the irrigation and drainage works have been completed and the arid land leveled for the application of water. These are the tasks of an engineer and not of a farmer. There the intending settler who is waiting for his farm can find employment. He can work for wages while his farm is being made ready for cultivation.

In every settlement there needs to be provision for expert assistance and direction in the building of houses and other improvements, and when the settlers are on the land there will be needed a superintendent who will be the confidential adviser of those directing this movement and a source of encouragement and admonition of the settlers. He will advise them about farming methods to save them from the consequences of inexperience and weakness. The government will have to depend on him for advice as to who should be aided, and those on whom aid will be thrown away because they lack the qualities essential to success. In many ways the superintendent of the settlement is the most important officer connected with this movement. He must understand the locality; he must understand the kind of farming that will succeed there; he must have tact and business judgment; he must have sympathy for those who strive, and firmness with those who undertake to abuse the government's generosity. In every settlement the first three years will be critical, and this is the period where advice, encouragement and direction will not only mean that the management or success and failure will be on the right side, but it will do much in the creation of the kind of agriculture and the kind of rural life that we as a nation need, and which nothing but community organization and the mobilizing of the expert knowledge of the country in constructive action will create.

Immigration Standards After the War

By HENRY PRATT FAIRCHILD

ONE of the knottiest problems which will have to be faced in the establishment of a world state or a league of nations will be the question of the movement of people. Under the national economy which has prevailed hitherto, every state has assumed its own right to determine what should be the constituents of its population so far as extrinsic contributions were concerned—in other words, the right to control immigration—and few states, with the exception of Japan, have questioned the legal or moral right of other states to make such a determination. On the other hand, few modern states have found it expedient to place limitations upon the movements of their own people within their own territory.

Whether the era of internationalism which is now dawning results in the formation of a world state, or in a more loosely coordinated league or federation of self-determining units, in either case there can be only two general alternatives as regards migrations. Either there will be a free right of passage over the entire territory included in the state domain, analogous to the present right of travel within a given country, or else restrictions must be placed by the central authority, or by the federated states in accordance with a common agreement and consent, with respect to boundaries broadly similar to those which now separate existing nations. In the former case, there would be introduced the new principle of discrimination within a given jurisdiction; in the latter, the way would be left open to unpredictable bitterness, jealousy and dissension. Either solution is full of uncertainties and dangers.

It is the purpose of this paper to show that, great as are the difficulties of migration control under a world government, for the present the scientific and only safe course is to insist upon restrictions (so far as the United States, at least, is concerned) at least as rigorous as those which were in operation before the outbreak of the war. The demonstration of such a proposition calls for a matter-of-fact, impersonal analysis which seems at

first to ignore the claims of humanitarianism and universal brotherhood, and yet is as fully legitimate as if the subject under discussion were the transplantation of fruit trees, or the control of river currents.

The ultimate goal of the present convulsion, the military phases of which have happily terminated, and the political and social phases of which have just begun, is the establishment of universal democracy. Democracy is composed of various elements, and is difficult of definition or description. But of its material elements there is no better embodiment and criterion than the standard of living of the common people. Where the standard of living of the people is high, relative to the general producing power of their territory, there democracy flourishes, by whatever name the government may be called. Where the masses live on a low plane of comfort, democracy languishes and dies, however great may be the tabulated wealth of that nation. Speaking of the world at large, if a higher standard does not result for the great bulk of mankind, all this blood will have been shed largely in vain. If there should result a general lowering of the standard over the entire globe it would be an unspeakable calamity, dwarfing all the untold horrors and losses of the conflict itself.

For the remainder of this discussion, let us lay to one side all question of the inferiority and superiority of racial stocks, and think only of the tangible values of material comfort and spiritual welfare, about which there can hardly be a difference of opinion. What is the obligation of the United States with reference to maintaining, and if possible raising, the standard of living of the great masses of mankind, of whatever race or affiliation?

The naive answer to this question might easily be that our duty is to share our blessings as liberally and impartially as may be with all those who care to participate in them, all the more so, since our losses in defense of democracy have been so trivial in comparison with those of our gallant Allies who have borne the burden of the conflict. If there were, before the war, hosts of conscientious, intelligent people who were ready to throw our doors wide open to "the down-trodden and oppressed of every land," there will be more now who will conceive it as the acme of national selfishness if we refuse asylum to the would-be refu-

gees who will seek to escape the drudgery and hardships of the reconstruction period in Europe.

Let us set down certain basic considerations bearing upon the question, with reference to which there will be general agreement and which will clarify the more dubious steps of the argument. In the first place, there is little doubt that before the war the people of the United States enjoyed a higher standard of living than any other considerable nation. This was ours, not because of any special merit of our own, but because of the peculiarly fortunate conjunction of land, climate and historical development which has given us an unparalleled command over the sources of wealth. Our standard is rather in the nature of a free gift than an achievement. In the second place, it will hardly be denied that if the spirit of universal brotherhood is to dominate the world, those of us who have been fortunate enough to have our lot cast in this bountiful land must not seek to monopolize these blessings entirely for ourselves, just because we happen to be now in possession of them, or because the nation of which we are the constituent parts has "owned" them for a century and a half. Surely the modern thing, the altruistic thing, the *post-magnum-bellum* thing to do is to share these benefits as unreservedly as possible, particularly with those suffering peoples with whom we have been so closely associated during a year and a half of war. The crucial question is whether or not we can best share them by allowing the individual representatives of those and other peoples free access to the land from which we draw our wealth and power.

No space need be devoted to a portrayal of the dire conditions which would result if large contingents of foreign labor should be admitted to this country within two or three years from the present date. It is painfully obvious that we shall have all that we can do to handle the problems of demobilization of our own army, and readjustment of our industrial situation, without serious injury to our standards of wages and working conditions. Such an immigration as was normal during a busy year before the war would now be an intolerably complicating factor. Probably this will be prevented without any direct action by the use of shipping for other purposes, and other contributory forces. But if it should transpire that the current of immigrant labor began to flow once more while our army was still being demobilized, such a current

should certainly be checked by effective means, however drastic. The larger problem, however, has to do with the effects which may be expected to follow the resumption of immigration when peace conditions are measurably restored.

Modern immigration, as is recognized by all authorities, is largely an economic phenomenon, that is, it represents a search for a higher standard of living. Almost without exception, the countries which furnish large bodies of immigrants to the United States have a standard lower than ours, or at least the classes which emigrate have a lower standard than similar classes in this country. More than that, our general standard is so much higher than that of most foreign countries that our lowest economic classes have a standard above that of much higher classes in other lands. Immigration, therefore, represents the introduction of lower standards into a country of higher standards.

The immigration of foreign labor to the United States tends to lower the standard of living of our working classes. It numerically increases the supply of workers bidding for employment and therefore tends to lower the prevailing wage or at best prevent it from rising. This is a sufficiently serious influence, but if the immigrants were habituated to the same standard as the natives, so that the effect was exclusively numerical, the result would not be necessarily calamitous, especially in times of expanding industry when immigrants come most freely. Immigration, however, has an influence much more powerful and much more disastrous, that is directly connected with the standard of living itself.

The introduction of a relatively small contingent of foreign labor into an industrial country may have a depressing effect upon the standard of living of the working people in that country out of all proportion to the numbers involved, provided that the immigrants are accustomed to a definitely lower standard than the natives. The process may be schematically described as follows: Suppose that there is in the United States an industrial town centering about one great plant which is the economic backbone of the community. Suppose that this plant employs 10,000 people, the bulk of the wage-earners of the town. These workers are reasonably efficient, and receive wages sufficient to enable them to maintain their families in a fair degree of comfort. Say that the aver-

age daily wage runs about \$3.00. Into this town there comes some morning a group of 500 raw immigrants in charge of a labor importer. These foreigners are men not materially inferior in economic productiveness to the natives of the town. But they have previously lived in a country where the conditions of existence are so much inferior that their customary wage is the equivalent of only \$1.50 of American money. To receive a wage of \$2.00 a day would therefore enable them to raise their standard very decidedly, and they will snatch at the chance to work for such a wage. Immediately upon their arrival, the labor agent goes to the superintendent of the plant and offers him 500 laborers at \$2.00 apiece. The superintendent looks them over, becomes convinced that they can do the work approximately as well as his present workers and agrees to take them on. He then calls in his foremen, and together they select the 500 least efficient of the \$3.00 men, who are thereupon informed that they are to be discharged. Upon learning the reason, they protest that they have their homes and families in the town, they do not know where else to find employment, and rather than lose their jobs altogether they will accept the wage offered to the foreigners. With a show of generosity, the superintendent offers to pay them \$2.25 a day, and they go back to their places. In the meantime the group of foreigners are still available. Therefore the next most inefficient group of 500 employes is selected, and the process repeated, with the same result. So it goes on, until eventually every one of the 10,000 original workers has had his pay reduced by fifty or seventy-five cents. At the same time, not one of the immigrants has been employed, and in the evening the group departs to try its luck elsewhere.

It goes without saying that in the complicated life of the nation at large the process does not go on so simply and mechanically as this. But exactly this principle is at work, however much its operation may be masked by contributory forces. There can be no doubt that the competition of laborers habituated to a lower standard is the most pernicious and insidious force which can attack the standard of living of the workers of a modern industrial democracy. It has been well stated that there is a Gresham's law in the industrial world, whereby the poorer labor drives out the better, and the lower standard eliminates the higher.

There can be no question that free immigration of foreign labor thoroughly undermines the standards of our common people. The process was already beginning to tell disastrously before the war, and would be immeasurably augmented if immigration should again go on unchecked, now that there will be so much added incentive for the tax-burdened natives of European countries to seek this land.

The worst of the whole matter is that there is no limit to the process. The drawing off of a sufficient number of laborers from such countries as India and China to destroy our own standard would produce no appreciable benefit in those countries, for the simple reason that it would not reduce the pressure of population there, and therefore could not raise their standard. A million immigrants a year perpetually could easily be drawn from China without decreasing its population in the least. The logical outcome of free immigration of workingmen under modern conditions of competitive bargaining for labor, as General Walker pointed out long ago, is the reduction of the standard of living of all countries to one dead level, and that the level of the originally most degraded and backward of them all.

It needs no argument to show that the United States is not called upon to sacrifice her standard for the sake of mere unreasoning sentimentality. She would be most recreant to her trust if she did so. Standards of living once lost can hardly be regained. It is our duty as a nation, our duty to humanity in the highest sense of the word, to protect our standard, in order that it may serve as a model and goal for the striving democracies in other lands, and that we ourselves may be in a position to help those democracies to climb somewhere near to the plane of their ideals.

The question of immigration after the war is often stated as the problem of whether we need to protect ourselves against the dumping of cripples and incompetents from foreign sources. The real question is, how we may protect ourselves from the able-bodied workers of less fortunate lands. Paradoxical as it may seem, we have much less to fear from the man who cannot earn his living than from the man who can. This is a rich country, and we could well afford to support for the rest of their lives thousands of the physical wrecks of war from England, France, Belgium, Italy, Greece, Russia and Serbia. It would be but a slight recog-

nition of our debt to those countries who have paid so much dearer for the liberty of the world than we have if our military hospitals and cantonments were gradually transformed into homes for as many disabled victims as our Allies chose to send us (under proper government supervision to prevent abuse), while we taxed ourselves liberally for their lifelong support and comfort. This would cost us nothing but money. But to permit the free transference of the labor from those countries to this under conditions which meant the disruption of our own standards would cost us our very life, and worst of all, would cost us our ability to be of real and permanent help to less fortunate lands.

The foregoing discussion rests upon the assumption that in general the present economic system will prevail,—private ownership of capital, competitive wage-bargaining, individual responsibility for family living conditions, etc. What might happen under conditions of socialism, or a world-wide minimum wage is merely matter for conjecture—except that it is hard to conceive of any minimum wage which would not speedily break down under conditions of free immigration.

Seven Points for a Reconstruction Labor Policy

By V. EVERIT MACY

A YEAR and a half ago we were little prepared for war. Our form of government, our habits of life, were based on peace requirements. Our entry into the war came with short notice, only two months elapsing between the introduction of ruthless submarine warfare and the declaration of war.

Now, apparently, we are as little prepared for an orderly return to peace as we were for war. Here again the possibility of such a changed condition has been evident for not much more than two months. The new feature in the past war was that victory required not only a fighting force with high morale, but an industrial force behind the line with an equally high morale and unlimited raw materials. In order to keep a well-equipped and well-fed army of two million men in Europe, it was necessary to have an organization of twelve to fifteen million men in war industries and transportation.

Just as an army cannot fight in the field without thorough organization, an industrial army cannot produce the necessary supplies without organization. It has been our pride that our government has not attempted to control or direct our industrial activities. It was no small task, therefore, to organize and of necessity, centralize control of the industrial life of one hundred million people accustomed to regulate their own affairs individually. The mere size of the country with widely varying conditions made the task seem almost impossible of accomplishment.

The longer the war continued, the more apparent became the necessity for control and centralization, and like other countries we learned that "business as usual" was just as impossible as "live as usual" or "think as usual."

Even after a year and eight months our industrial war machinery is not sufficiently complete in its control to prevent an excessive labor turnover, and consequently inefficient production.

It is only necessary to mention a few of the various agencies by means of which the government has exercised control and centralized responsibility, to realize how far we have travelled from

our ways of peace. As an example, we have the War Industries Board and its control over all raw supplies, the War Trade Board controlling all foreign commerce, the Fuel Administration, and the several labor adjustment agencies.

What we must now realize is that it will probably take us longer to return to our former peace conditions in industry than it has required for us to develop a smooth-working war machine. It takes less time to consolidate and centralize than to separate a consolidation into its component parts, or to decentralize. We now have the famous problem of "unscrambling the eggs."

Most of the legislation, executive orders or agreements creating these controlling bodies provide for their dissolution, either upon the termination of the war or shortly thereafter. If these stabilizing forces are at once removed will not Europe, short of food, fuel, and all necessities, be willing to sweep our country clean of all supplies? Unless our exports are controlled, will the poorest countries and those that have suffered the most get their share? Can they afford to enter a scramble of such unlimited bidding as will result from the removal of all government regulation? Will our own industries be aided or hindered if each manufacturer is free to bid for his materials and labor as he thinks best? Could anything but utter chaos result from any such attempt to immediately return to pre-war conditions?

No phase of our industrial problem will be more difficult to readjust than that of labor, for labor includes the human problem. Whether the coming changes to peace conditions are made with a minimum of friction depends entirely on whether a spirit of coöperation is shown by the conservative and constructive labor leaders and large employers in working together with existing government agencies. It cannot be accomplished by any one of these three interested parties alone.

From my experience during the past year and a half I would emphasize the following points:—

1. The War Department, Navy, Shipping Board, and Labor Department should consult together as to what contracts involving purely war material should be immediately cancelled and what contracts for products having peace values should continue. For instance, the need for ships is still so pressing that this industry might be speeded up, thus providing work for many men

thrown out of employment by the cancellation of ammunition or aeroplane contracts. The housing program in overcrowded cities could well be continued. The indiscriminate cancellation of contracts cannot but result in dangerous unemployment, great financial loss to employers and waste of government money. The government cannot suddenly throw into the streets large bodies of men who have previously been earning unusually high wages without producing among them a strong feeling of resentment and unrest.

2. The National Employment Service should be strengthened and extended to aid in transferring men and women from war to peace industries.

3. Careful plans should be developed for the placement of the 4,500,000 soldiers before they are demobilized.

4. Better organization among the employers is necessary, for without organization there can be no real leadership and no constructive program can be carried out. It would also seem most essential that where associations of employers do exist, the membership should have a greater sense of loyalty to that association. They can learn much from the members of the labor organizations in the way of sinking their personal interests for the good of all in the industry. The industries in which capital and labor are both well organized and work under trade agreements, are the ones in which the fewest labor difficulties occur.

5. It is obvious that a people will not be content to sacrifice their all for democracy in a war, and when peace is won have nothing to say about the terms and conditions under which they spend half their waking hours. Whether we like it or not, whether we are going in the right direction or not, we are living in a period of organization. The day of unrestricted individualism is gone. There is no more reason to insist that those whose labor is their capital should deal as individuals than that each capitalist should be in business by himself. If people have a right to pool their cash capital in a corporation, the laborers have the same right to pool their labor capital in a union and deal collectively.

If an employer does not wish to enter into an agreement with a union, that is his privilege, but he certainly cannot justly refuse to enter into an agreement on wages and working conditions with a committee representing his own employes. In dealing with a

recognized union the employer has the advantage of knowing the union is protecting him from unfair competition as to wages and hours by competing firms, while a committee of his own employes can give no such guarantee. If the employers and men in an industry are thoroughly organized, wages and conditions can thus be stabilized and the turnover of labor caused by the men changing from shop to shop to get better wages can be avoided.

It must be remembered that early in the war a committee of six employers, representing the National Conference Board, and six representatives of organized labor drew up a series of principles for the guidance of the government during the war. One of these principles was that no man should be denied the right to join a union. All government labor adjustment agencies have recognized this principle and the consequence has been that since the fear of being discharged or discriminated against for belonging to a union has been removed, hundreds of thousands of men and women have become members of labor organizations. The employes in many industries, who before the war were not members of a trade union, are now fully organized.

A serious danger created by this rapid increase in union membership is that the new recruits to unionism are not disciplined in the methods or responsibilities of organization, and like all new converts will be apt to resort to fanatical and unwise measures. It is in backing the strong and conservative leaders of old and well-managed unions that employers can do most to safeguard their own interests and the welfare of the nation. Otherwise, with their new and untried power, the leadership of the unions may pass into radical and irresponsible hands. If we are to have a comparatively smooth return to peace conditions in industry, these facts must be recognized.

Most of the friction arising between employers and labor organizations is due to the arbitrary attitude of some foreman who is jealous of his dignity, or of similarly stupid action on the part of local union officials who wish to display their importance. If the men and the employers are well organized and deal with each other as national or district organizations, friction would be much reduced. As a rule the more important the position held by a man the greater his knowledge, the broader his vision and the wider his experience. As he assumes responsibility he becomes

conservative. As long as labor questions are left to men in subordinate positions, whether in a plant or union, men with very limited experience or opportunities, one is bound to meet with ignorance and prejudice.

6. Just as it has been impossible during the war, and will be impossible immediately on the return of peace, to permit the free play of the law of supply and demand, and has therefore been necessary to control the price of raw materials or finished products, so will it be disastrous to leave the questions of wages and hours to be determined by this same law. There is not a sufficient supply of labor to meet the demands of industry, for while millions of men are still in the army and immigration is cut off, the shortage will probably continue. If all labor adjustment agencies are at once suspended and each employer is left free to bid as he chooses, men will be drawn from shop to shop at ever increasing prices and a lessened output, due to the constant shifting.

In applying the law of supply and demand to the supply of labor, people forget that labor is not like raw material, for labor cannot be separated from the individual who performs the labor. The law of supply and demand can only apply, therefore, within certain limits. A man, in order to render an efficient return for the wage he receives, must have sufficient food, rest, reasonable conditions for his family and some relaxation. His wage cannot go below a certain point and permit of his retaining his productivity. Wages must therefore bear some relation to the cost of living. We cannot expect a general and sudden drop in present wages unless there is a corresponding lowering in the cost of living. In many occupations, however, owing to the pressure of war and the lack of sufficient government control, wages have risen far in excess of the increased cost of living and out of all proportion to the value of the service rendered. The only stabilizing influences have been the various government boards, whose duty it has been to adjust wages. The employers, on the other hand, have been the most demoralizing influence and on their shoulders must rest the responsibility for any excessive wages that are now being paid. They have evidently thought that by doubling the wage they could double the number of available men. They have followed the policy of simply bidding higher and higher without regard to whether the men were drawn from non-essential industries

or the most important war work. Where the government agencies have tried to restrain this practice, the employers have resorted to deception. They have classified men as helpers when they were doing laborers' work; as skilled mechanics, when they were helpers; called them foremen when they were doing mechanics' work; paid them for more work than was actually done, offered excessive payment for overtime; and permitted the men to lay off during regular hours and week-days, so as to enable them to work more overtime and on Sundays at extra pay. These are some of the methods employed to draw men to a particular plant at the sacrifice of production.

You may ask how the employer could afford such practices. He could not in normal times, under normal competitive conditions. Remember, however, that the government required the labor of more men in war industries than there were men. The employer did not have to sell his goods on a competitive market, for the government was taking all he could produce and demanding more. The government was therefore paying the bill, including the excessive wage. An employer apparently argued that if he could get the reputation of being liberal while his competitor adhered to a lower scale of wages, he would get the best and greatest number of men and so could turn out more war material and make more profits. He did not stop to think that by so doing he might draw men from equally important war work. These facts explain much of the cause for the present high average of earnings.

The employers who had direct contracts with the government, and therefore had to abide by wage scales fixed by government agencies, were at a disadvantage, owing to the uncontrolled bidding up of wages by subcontractors who had no direct government contact and were therefore not held to any particular wage scale. An excellent example of such a situation is that of the coppersmith trade, in the shipyards. The Shipbuilding Labor Adjustment Board fixed, in April, seventy-two and one-half cents an hour for the coppersmiths in the yards on the Atlantic Coast. The outside shops at once bid eighty-five cents and ninety cents an hour and took seventy-five per cent of the coppersmiths out of the shipyards, with the result that the shipyards were compelled to sublet their coppersmith work to outside shops. These shops

were not equipped with the expensive machinery necessary to perform the work efficiently, so that each coppersmith could produce less in a day than if he had remained in the shipyard. If, however, the Labor Adjustment Board had authorized an increase in the scale to meet the outside shop rate, the subcontractors would merely have advanced their rates ten or fifteen cents more, for the number of coppersmiths was limited and there were no more to be had. Thus, through the competition of employers for labor, the government was compelled to pay an exorbitant price for all coppersmith work used in the construction of ships. The same situation was more or less true in all other crafts.

7. While a law requiring compulsory arbitration is of little value where large numbers are involved, as it is impossible to punish thousands of violations, there is much to be gained by an agreement between employers and unions to arbitrate all grievances. It would seem, therefore, that one of the most effective means of obtaining a rapid and orderly change in industry from war conditions to those of peace would be the establishment of boards of arbitration composed of representatives of organized employers and organized labor, with an agreement that no strike or walkout should take place. As soon as the government ceased to take the greater part of the output of any industry, then the Government Labor Adjustment Agency, having jurisdiction in that field, should be dissolved. The responsibility for maintaining peace and production in that industry should then be placed in a board of employers and employees as described above. As long, however, as the government interest is paramount, the present government boards should remain.

Never has there been a time when clear thinking and patience, together with a willingness to submerge one's personal interests in the welfare of the nation, were more necessary. Unless our citizens as a whole prosper, we cannot prosper as a nation.

Federal Policies for Women in Industry

By MARY VAN KLEECK

WITH the signing of the armistice, women in industry assumed a position in the public mind radically different from their status two weeks earlier. Two weeks before, government officials, employers, the wives, mothers and friends of soldiers and all the rest of the general public were showing lively interest in persuading women to undertake new occupations in order to release men for the war and to serve with adequate supplies those already at the front. With peace in sight the change seemed to be swift and radical. The question heard most frequently was whether women would now retire from industry. At least one central labor union passed a resolution calling upon women to give up their positions in order that there might be place for returning soldiers. For the moment it seemed as though the remarkable recognition of the importance of women's work in the war was leaving no permanent impression. The old idea that their position in industry was a transient one was now uppermost in the public mind with the added strength of a patriotic appeal to recognize the right of the soldier to his job. The issue thus raised cannot be settled in a few weeks. About the answer to it will center the policies to be adopted by federal and state agencies and by those voluntary associations of employers and workers through which standards governing the employment of women are established.

No wise policy for the period of readjustment can be developed without clear realization of the position of women in industry during the war and the lessons for industry which the war taught. The outstanding fact was the change in attitude toward the work which women could do. Illustrations of their new occupations occur readily to mind. They have been conductors on street cars, elevator operators, taxicab drivers, railroad employes in a variety of occupations and machine operators in branches of the machinists' trade usually considered men's work. It is not to be forgotten that before the war there were very few large industries in the country in which there were not some women employed, so that the change was not so much the work which they did as the

attitude of employers and the public toward it. As the war went on it was expected of the progressive employer that he would find in his organization as many places as possible for women, and the space given in magazines and newspapers to descriptions of the successful employment of women in unusual work gave evidence of the keen interest in breaking down barriers.

With the employment of women in new positions and the necessity for keeping production at its normal level, experience very soon taught that there were conditions which made for the effective employment of women and that there were conditions which put obstacles in the way of their producing satisfactory results. This fact led to the organization of agencies in the federal government to study the conditions of women's employment and to advise the industries regarding hours, wages and proper working environment. The Ordnance Department, faced with an enormous production program, organized as part of its Industrial Service Section a women's branch with representatives in every district office of the department and in the arsenals employing women. The U. S. Railroad Administration established a women's section in its Labor Division. With the organization of the War Labor Administration, established by appropriation from Congress early in the summer of 1918, the Woman in Industry Service began its work as part of the Department of Labor. Its function was to advise the Secretary of Labor on all matters affecting the employment of women. As the secretary had been designated by the President as the Labor Administrator, to develop consistent national policies for labor during the war, this position of the Woman in Industry Service was an important one. The Woman in Industry Service was also represented on the War Labor Policies Board, organized to represent those departments of the government concerned with production for the war, and concerned therefore with labor problems as a fundamental aspect of production.

Several different statements of standards which should govern the employment of women were issued by various agencies associated in the War Labor Administration, and these formed for the first time a definition of the policy of the federal government. General Orders No. 13 by the Chief of Ordnance, which were issued simultaneously by the Quartermaster General as sugges-

tions to manufacturers working on contracts for those departments and to plants under the control of the government, declared that the eight-hour day, prohibition of night work, one day of rest in seven, a minimum wage based on the cost of living, and equal pay for women doing the same work as men, were the "mechanisms of efficiency." Similar conditions were urged by the Committee on Women in Industry appointed by the Committee on Labor of the Advisory Commission of the Council of National Defense. The U. S. Railroad Administration also adopted the principle of equal pay for equal work. In the statement of national policies which should underlie industrial relations during the war, formulated by the War Labor Conference Board and confirmed by the President when the War Labor Board was appointed, it was stated that "if it shall become necessary to employ women on work ordinarily performed by men, they must be allowed equal pay for equal work and must not be allotted tasks disproportionate to their strength." At the same time all of the other principles laid down by this board, such as the right to collective bargaining, applied also to women workers.

The great gain in this consensus of opinion of the various federal agencies rests upon the fact that the statements were issued when the whole energy of the country was concentrated upon production. Standards for which the labor movement and those public-spirited citizens interested in labor legislation had struggled for many years, thus during the stress of war received the sanction of the federal government as conditions essential to satisfactory production.

The means of enforcement were found in the two-fold relation of the government to industry, first as an employer of labor in government-owned plants, and second as the largest purchaser of the products of industry during the war. Certain provisions regarding labor conditions were written into the contracts. Early in the war the contracts with the Quartermasters Department contained clauses prohibiting the giving out of army clothing to be made or finished in tenements. One of the first acts of the War Labor Policies Board was its recommendation that the provisions of the Federal Child Labor Law, which had recently been declared unconstitutional by the Supreme Court, should be written into contracts of all the producing departments repre-

sented in the board. Shortly afterward a clause requiring full compliance with state labor laws was added to the contracts and at the same time officials of state departments of labor were deputized by the Secretary of War, the Secretary of the Navy, the Director of the Shipping Board and the Director of the Housing Corporation to coöperate with federal agencies in enforcing this contractual obligation.

It should be noted that the contracts never contained all of the provisions included in the standards issued by the various government departments for the employment of women. For example, the principle of the same wage for the same work was not included as a contractual obligation. From the point of view of enforcement the significant fact in the conditions of women's work during the war was the insistence of the federal government upon the observance of state labor laws. In its statement of policy the federal government went much further and laid the basis for high standards in state labor legislation.

Immediately after the signing of the armistice, the relation of the federal government to labor conditions changed, since its power of enforcement resting on its contracts with industry was decreased with the curtailment of contracts. For women workers, therefore, the problem during the period of readjustment is to find new means of enforcement of standards which have received such authoritative sanction from the nation at war. The agencies to be relied upon now include the states, through labor legislation and through vocational training; the industries, through the voluntary adoption of high standards of labor conditions in shop organization; and working women themselves, through the strengthening of collective action by them. Clearly, the three groups will need the leadership of federal agencies since in peace no less than in war the problems of labor are questions of national importance.

Within a month after the signing of the armistice the Woman in Industry Service of the Department of Labor with the approval of the Secretary of Labor issued the following statement of standards which should be a guide in the employment of women after the war. The statement is based on the experience of the nation during the war. It has been endorsed by the War Labor Policies Board.

Standards Recommended for the Employment of Women

(In the following outline the word "shall" and the darker type indicate those provisions which are of the most vital importance.)

I. HOURS OF LABOR

1. **DAILY HOURS.** No Woman Shall Be Employed or Permitted to Work More Than Eight Hours in Any One Day or Forty-Eight Hours in Any One Week. The Time When the Work of Women Employes Shall Begin and End and the Time Allowed for Meals Shall Be Posted in a Conspicuous Place in Each Work Room and a Record Shall Be Kept of the Overtime of Each Woman Worker.

2. **HALF-HOLIDAY ON SATURDAY.** Observance of the half-holiday should be the custom.

3. **ONE DAY OF REST IN SEVEN.** Every Woman Worker Shall Have One Day of Rest in Every Seven Days.

4. **TIME FOR MEALS.** At Least Three-Quarters of an Hour Shall Be Allowed for a Meal.

5. **REST PERIODS.** A rest period of ten minutes should be allowed in the middle of each working period without thereby increasing the length of the working day.

6. **NIGHT WORK.** No Woman Shall Be Employed Between the Hours of Ten P.M. and Six A.M.

II. WAGES

1. **EQUALITY WITH MEN'S WAGES.** Women Doing the Same Work as Men Shall Receive the Same Wages with Such Proportionate Increases as the Men Are Receiving in the Same Industry. Slight changes made in the process or in the arrangement of work should not be regarded as justifying a lower wage for a woman than for a man unless statistics of production show that the output for the job in question is less when women are employed than when men are employed. If a difference in output is demonstrated, the difference in the wage rate should be based upon the difference in production for the job as a whole and not determined arbitrarily.

2. **THE BASIS OF DETERMINATION OF WAGES.** Wages Should Be Established on the Basis of Occupation and Not on the Basis of Sex. The Minimum Wage Rate Should Cover the Cost of Living for Dependents and Not Merely for the Individual.

III. WORKING CONDITIONS

1. **COMFORT AND SANITATION.** State labor laws and industrial codes should be consulted with reference to provisions for comfort and sanitation. Washing facilities, with hot and cold water, soap and individual towels, should be provided in sufficient number and in accessible locations to make washing before meals and at the close of the work day convenient. Toilets should be separate for men and women, clean and accessible. Their numbers should have a standard ratio to the number of workers employed. Workroom floors should be kept clean. Dressing rooms should be provided adjacent to washing facilities, making possible change of clothing outside the workrooms. Rest rooms should be provided. Lighting should be arranged so that direct rays do not shine into the workers' eyes. Ventilation should be adequate and heat sufficient. Drinking water should be cool and accessible with individual drinking cups or bubble fountain provided. Provision should be made for the workers to secure a hot and nourishing meal eaten outside the workroom, and if no lunch rooms are accessible near the plant, a lunch room should be maintained in the establishment.

2. **POSTURE AT WORK.** Continuous standing and continuous sitting are both injurious. A seat should be provided for every woman employed and its use encouraged. It is possible and desirable to adjust the height of the chairs in relation to the height of machines or work tables, so that the worker may with equal convenience and efficiency stand or sit at her work. The seats should have backs. If the chair is high, a foot rest should be provided.

3. **SAFETY.** Risks from machinery, danger from fire and exposure to dust, fumes or other occupational hazards should be scrupulously guarded against by observance of standards in state and federal codes. First aid equipment should be provided. Fire drills and other forms of education of the workers in the observance of safety regulations should be instituted.

4. **SELECTION OF OCCUPATIONS FOR WOMEN.** In determining what occupations are suitable and safe for women, attention should be centered especially on the following conditions which would render the employment of women undesirable if changes are not made:—

A. Constant standing or other postures causing physical strain.

B. Repeated lifting of weights of 25 pounds or over, or other abnormally fatiguing motions.

C. Operation of mechanical devices requiring undue strength.

D. Exposure to excessive heat,—that is, over 80 degrees, or excessive cold,—that is, under 50 degrees.

E. Exposure to dust, fumes, or other occupational poisons without adequate safeguards against disease.

5. **PROHIBITED OCCUPATIONS.** Women Must Not Be Employed in Occupations Involving the Use of Poisons Which Are Proved to Be More Injurious to Women Than to Men, Such as Certain Processes in the Lead Industries. Subsequent rulings on the dangerous trades will be issued.

6. **UNIFORMS.** Uniforms with caps and comfortable shoes are desirable for health and safety in occupations for which machines are used or in which the processes are dusty.

IV. HOME WORK

1. No Work Shall Be Given Out to Be Done in Rooms Used for Living or Sleeping Purposes or in Rooms Directly Connected With Living or Sleeping Rooms in Any Dwelling or Tenement.

V. EMPLOYMENT MANAGEMENT

1. **HIRING, SEPARATIONS AND DETERMINATION OF CONDITIONS.** In establishing satisfactory relations between a company and its employes, a personnel department is important charged with responsibility for selection, assignment, transfer or withdrawal of workers and the establishment of proper working conditions.

2. **SUPERVISION OF WOMEN WORKERS.** Where women are employed, a competent woman should be appointed as employment executive with responsibility for conditions affecting women. Women should also be appointed in supervisory positions in the departments employing women.

3. **SELECTION OF WORKERS.** The selection of workers best adapted to the requirements through physical equipment and through experience and other qualifications is as important as the determination of the conditions of the work to be done.

VI. COÖPERATION OF WORKERS IN ENFORCEMENT OF STANDARDS

1. The Responsibility Should Not Rest Upon the Management Alone to Determine Wisely and Effectively the Conditions Which Should Be Established. The Genuine

Coöperation Essential to Production Can Be Secured Only if Definite Channels of Communication Between Employers and Groups of Their Workers are Established. The Need of Creating Methods of Joint Negotiation Between Employers and Groups of Employees is Especially Great in the Light of the Critical Points of Controversy Which May Arise in a Time Like the Present. Existing Channels Should Be Preserved and New Ones Opened if Required, to Provide Easier Access for Discussion Between Employer and Employees.

The new note in this outline is in the paragraph which deals with the basis of determination of wages. The principle of equal pay for equal work is but a partial step. In its application during the war, one employer, for instance, objected to paying women in one department the wages which men in the same position had been earning, while women in an adjoining department were receiving about half as much for work which was different but no more difficult to learn. In the opinion of this employer this indicated that women's rates should be established in the occupations hitherto filled by men. If the principle of equal pay for equal work be as sound as the support of it during the war would seem to indicate, such an instance suggests an anomaly of long standing in basing wages not upon occupation but upon sex. Undoubtedly there will be great differences in wage rates in different processes and in different industries, but the difference should not be due to the fact that certain occupations are filled more largely by women than by men.

The comparative wages of men and women will be the most crucial problem of the readjustment period. As women have entered a wider range of occupations it will be possible for them to become the unwilling competitors of men in lowering standards of wages. Moreover, now as before the war, women are working to earn a living and the facts show that many are also supporting dependents. Low wages for women mean an inadequate standard of living in the families in which they are the chief support. Low wages for women mean a lower wage scale in those industries in which they are entering in large numbers. The upbuilding of the country after the war will depend upon the possibility of maintaining and raising the standards of living. A theory of wages which establishes a lower scale for approximately one-fourth of the workers of the country, that is, the women, is a menace to the standard of living of the country.

The right of the returned soldier to his job is not a labor policy

upon which to build a program for women in industry. It is a matter of the relation between a firm and the soldier, and public opinion has endorsed as fair and just the determination of many companies to reinstate the men who have gone to war. In many instances, however, the former positions of the soldiers are not held by women but by men. This is not a problem of women's work, nor is the position of the woman holding a soldier's job any different from that of a man who has taken his place. For both men and women workers the immediate task is to accomplish the change from a war basis to a peace basis with the least possible unemployment and with the reinstatement of the largest number of soldiers and war workers in normal occupations for which they are best adapted. The task of production ahead is enormous, with the rebuilding of those things which have been destroyed during the war and with the opening up of new markets. This presents, therefore, a task of organization of industry in such a way as to utilize to the full all of the available working forces of the country.

Women before the war have constituted an important part of the working force of the country. If the tendencies clearly reflected in their increasing employment in the century before we entered the war are to be a guide, then the problems of women in industry are evidently a permanent part of the labor problem which the country now faces. The experience of the war gives ground for optimism if out of it can be evolved more effective state action, and most fundamental of all, a new spirit and method of self-government in industry which shall give equal recognition to women workers.

Can We Eliminate Labor Unrest?

By ROBERT W. BRUÈRE

EMLOYERS who want a stable labor force almost invariably prefer married men. Married men are steadier, they say. They are less capricious, their ears are not so keen to catch rumors of better jobs elsewhere or so ready to listen to the trouble-making agitator. The first answer to the question concerning the elimination of labor unrest is suggested by this preference of the employers. If you want to anchor the worker, pay him a living wage, not an individual living wage, but enough to keep him and his family in health and decency and comfort, enough to enable him to feed and clothe his children well and to give them a thoroughgoing education. The government has announced that the minimum comfort wage for an average American family is \$1,400. A national minimum wage of \$1,400 would be a good beginning toward the elimination of labor unrest.

COMPLEMENTARY EARNINGS AND WAGE SCALES

But any self-respecting American worker today wants to feel that he is his own man, that his job and his wage are free from the taint of his employer's beneficence, free from the taint of pseudo-charity. He wants to be in a position to command what his work is worth, so that he will not be compelled to force his wife and children into the factory to make both ends meet. Too many employers are in the habit of interpreting the family wage as meaning the total earnings of all the members of the family, rather than the wage paid to the head of the family alone. The country is dotted with human by-product industries, industries that exploit the labor of women and children compelled to go to work because the earnings of the father are inadequate. It is not to the best interest of a democratic community that the father should be forced to be a party to the exploitation of his wife and children. If they are to go to work, as under certain circumstances they may find it desirable to do, their earnings should be-

long to them as a family reserve for the luxuries that make up the amenities of life, and for insurance against sickness, for education and such holidays as all healthy-minded people should be free to enjoy at reasonable intervals.

LABOR UNIONS AS AGENCIES FOR ELIMINATING UNREST

In order to be free to command what his work is worth, the worker must have his feet on solid ground outside of the jurisdiction of his employer. And the only practical way in which he can secure this independent footing is by joining and energetically supporting the union of his trade or industry. A non-union man today is economically free only by accident; his union card is his only real insurance against economic dependence, against dependence upon the good-will of his employer for his chance to earn a living. Next to a guaranteed minimum family wage, the union is the most efficacious agency for the elimination of labor unrest. Incidentally, except in the case of the lower paid women workers, the union has been the most potent influence in the establishment of a family wage for its members.

The union performs another important function of the same nature. For the unmarried man and especially for the single man who has cut loose from his family ties, it is, even more than the church and the lodge, the substitute for the family itself. When a trade or an industry is well organized, the union carries the labor reserve for the industry and is generally, as in the coal fields and the photo-engraving trade and the needle industry, in a position to keep the employer supplied with a relatively steady flow of skilled men.

THE IMPORTANCE OF A PERSONNEL MANAGER

But a family wage and the influence of the union are not enough. One of the most fertile causes of labor unrest is the brutal and unnecessary monotony of work in the modern machine-equipped factory, mine or mill. Whether he is definitely conscious of it or not, a workman's nerves are gradually upset by dirty and slipshod shop conditions and by the monotony of the endless repetition of stupid processes. To eliminate labor unrest and so to reduce labor turnover, the enlightened employer will give his personnel manager equal rank with his sales and technical manager. In

any well-equipped plant, there should be a man of high intelligence and social imagination whose exclusive business it should be to select workers in accordance with their fitness for the jobs they are expected to fill and to vary their work so as to prevent the development of ennui, staleness and a vague sense of futile monotony. The personnel manager should be entrusted with the supervision of the cleanliness and physical upkeep of the shop, with the provision of decent toilet and washroom facilities, lunch room and all the human and domestic comforts which gave dignity to the workshop of the old home-staying guild craftsman. And the authority of the personnel manager in all matters affecting the health and comfort of the men should be coördinate with the authority of the works-superintendent over the strictly technical processes of manufacture.

FULL PLAY FOR THE CREATIVE IMPULSE

But again, mere physical comfort within the shop is not enough. Many plants reasonably well-equipped along housekeeping lines have found that the workers fail to appreciate the good things that are "done for them." A self-respecting workman does not want to have nice things done for him, any more than he wants to be beholden to his employer's beneficence for his job. He has an instinctive desire to participate in the control of the conditions under which he works and, again, to participate as a right and not as a favor. He wants to have an opportunity—though of course he has often not developed a conscious definition of his want—to exercise his creative instinct both in shop organization and in the improvement of the technique of his job. Many workers behave like clods untouched by the living breath of God, not because they are clods really, but because the entire organization of most modern plants conspires to snuff out the creative spark that is the universal inheritance of all reasonably normal men.

SCIENTIFIC MANAGEMENT AND LABOR UNREST

But does this not lead us directly to "scientific management," the Taylor system and all the rest? It is unnecessary to go into all the reasons why skilled workmen, and especially the workmen whom the unions have begun to socialize, hate "scientific management." The best statement of this problem which I know,

was made by the late Robert G. Valentine in a letter to one of Mr. Taylor's most ardent disciples:

In attempting to analyze the effect of time study on an industry, I believe it important to distinguish clearly between the use of time study for the purpose of analyzing a job and the use of time study for the purpose of setting tasks after a job has been analyzed.

In practice, time study today is made by the employer for the benefit of the employer, and only such benefit accrues to the worker as in the judgment of the employer is necessary to produce a result beneficial to himself. This is the utmost extent to which the worker can be alleged to share. On the other hand, as industry is at present organized, with the control of this matter in the hands of the employer, both the individual worker and all his fellows stand, both directly and indirectly, to lose in this matter:—because time study, together with the whole process of thoroughgoing analysis of jobs, tends steadily to reform the whole industrial process. Theoretically also this may be a completely excellent thing for society. Practically, however, it is on a certain stability in basic industrial organization, changing only from time to time and not existing as a perpetual flux, that the worker has heretofore been able to take his stand and win for himself the shorter hours of labor, the higher wages, the sanitary working conditions, and above all an attitude of growing, intelligent understanding and respect for him as a man on the part of the employer. All of which things would never in the world have come to the worker from the hands of the employers. These are things that only come to those who win them. It is perfectly clear to me, therefore, that the workers cannot wisely submit or consent to any industrial method like time study which tends so to shift the ground on which they stand under their feet, *unless* they have an actual share with the employer in creating new ground on which they themselves will be as strong as they were on the old. Under those conditions and under those only can they be expected to cooperate in the demolition of the old ground.

DEMOCRATIC ADMINISTRATION THROUGH JOINT INDUSTRIAL COUNCILS

If we are to meet the conditions suggested by Mr. Valentine, we shall have to devise a much more democratic administrative mechanism than any so far proposed by the organized employers or even by the organized workers of America. What seems to me the most promising approach to the problem stated by Mr. Valentine is that outlined by the Whitley Committee for the British Ministry of Reconstruction. The Bureau of Industrial Research, with which I am associated, has just published in a single volume reprints of all the Whitley Committee's reports and the record of the Joint Industrial Councils of England so far as they have reached this country. I may here quote a few sentences giving the gist of the Joint Industrial Council scheme.

In their first report on Joint Industrial Councils, the representative employers and trade unionists who composed the Whitley Committee recommended the following:

The establishment for each of the principal well organized industries of a triple form of organization, representative of employers and employed, consisting of Joint Industrial Councils, Joint District Councils, and Works Committees, each of the three forms of organization being linked up with the others so as to constitute an organization covering the whole of the trade, capable of considering and advising upon matters affecting the welfare of the industry, and giving to labor a definite and enlarged share in the discussion and settlement of industrial matters with which employers and employed are jointly concerned. . . . For trades in which organization is considerable but not yet general, a system of joint councils with some government assistance which may be dispensed with as these industries advance to the stage dealt with in our first Report.

Taking our first and second Reports together they constitute a scheme designed to cover all the chief industries of the country and to equip each of them with a representative joint body capable of dealing with matters affecting the welfare of the industry in which employers and employed are concerned, and of caring for the progressive improvement of the industry as an integral part of the national prosperity.

It is important to note that the Whitley plan as compared with what has come in America to be known as the Rockefeller Plan, provides for the representation of the workers through their unions which have their feet on independent ground outside the jurisdiction of the company.

SUBSIDIARY POINTS IN A PROGRAM TO ELIMINATE UNREST

There is no room in so brief a note as this to go into the bearing upon labor unrest of an effective system of employment exchanges, of plans for the proper housing of workmen's families, of coöperative buying and selling, of the dozen and one equally important subsidiaries to the main planks of a modern program for the elimination of labor unrest. Most of them will be found stated far more authoritatively than I can state them in the Report on Reconstruction made to the British Labor Party by its extraordinarily competent sub-committee and reprinted for distribution in America by *The New Republic* of New York. The most important immediate requirements, as I see them, are,—the national establishment of the minimum family wage for all adult workers, male and female; the extension of the principle of organization in industry, both on the side of the employers and the workers; the constitutionalizing of industry through the development of joint industrial councils on a national as well as upon a district and local community basis; and the addition to these councils, as to the staff of each manufacturing plant, of experts in human psychology whose entire business it should be to satisfy the healthy craving of the workers for decency, cleanliness and light in the

places where they spend the greater part of their effective lives and to inspire both employers and workers with the fundamental human worth of creative workmanship. When industry itself becomes the great school of creative workmanship and of service to mankind through production freed from the curse of sabotage as now practiced by employers quite as extensively as by wage workers, we may hope that labor unrest will begin to disappear.

Post-War Causes of Labor Unrest

By MALCOLM KEIR

PROPHECY is a hazardous enterprise, not only because the conditions upon which predictions are made so often shift, but also because what can be foreseen may be forestalled. In these fast-moving times, what is prophecy in November, when this is written, may be history in January, when it is read. It is with diffidence then that there are here set down a few of the factors in war industry that seem to portend labor problems. What appear to be among the most obvious elements of future unrest are the control of the government over industry; the administration of organized labor; the entrance of women into new types of work; the ban of the "color line"; the policy toward immigration; and the adjustments to war-made improvements in machinery.

At the beginning of the war, after the government had assumed rigid control over fuel, raw material, and quality, quantity or variety of product, it discovered that output of imperatively necessary articles was vitally hampered by the friction between employers and employes upon long-standing issues regarding hours, working conditions, wages and the rights to organize. It became the duty of the federal authorities to prescribe the internal policies of private business in order that the war program might go forward at full speed. The procurement divisions of the army and navy inserted stipulations in their contracts that established labor's long cherished principle of the eight-hour day with extra pay for overtime and double pay for holidays; granted the privilege of collective bargaining; assumed the right to select arbitrators; and insisted upon the formal adjustment of grievances. Boards, commissions and departmental divisions were created to preserve amicable industrial relations. For the most part these bodies went beyond the contract provisions by defining and upholding legitimate collective labor activities and enforcing their decisions by the threat to cancel contracts or commandeer plants.

These drastic measures were supported by public opinion, and

accepted for the most part in a patriotic spirit by employers; but no reform so sweeping could hope to win universal approval. Since the contract was the basis for the new labor regulation, some Chicago manufacturers tried to escape by first securing the award of a contract but purposely neglecting to sign it until the work was completed, a quibble that was unavailing but nevertheless significant of an underlying purpose to thwart labor dominance. A case involving the Smith & Wesson Co., of Springfield, Mass., wherein an award of the War Labor Board so upset long established customs in the plant that the officers preferred to lose their works through commandeering rather than submit, is typical of the attitude of a considerable number of conservative establishments toward outside interference in their business. On the whole, however, the government's war labor policies met with little opposition.

But men who willingly supported the government during war may not be so compliant in peace. Possibly some one will contest the whole regulatory program, and it is doubtful if our federal machinery for the conduct of war-industry could bear the microscopic examination of the law. A court might have difficulty in establishing the validity of the boards operating in Washington or of labor improvements enforced through a contract where a man had no choice but to sign. Such legal battles are likely to be attended by labor troubles because neither employers nor employes will yield their supposed rights or privileges without attempting coercion. Then, too, men who submitted to necessity during war but whose prejudices against labor were magnified by the petty tyranny incidental to the suddenness of labor's power, will fight against the retention during peace of any part of the war labor program. One influential officer of a great clothing concern said recently: "I am sick of the daily demands of labor committees or union leaders. *I am looking for the day when I can see a million men outside my office begging work: then we can teach labor some sense.*" For that man—and all of his type—labor controversy is inevitable. It is also clear why all such men will try to do their utmost to sever private business from public supervision.

Government control of industry, however, can hardly terminate with the war. A laissez-faire policy would result in the over-

production of some articles and the lack of others, with a consequent loss of materials, profits and labor. But if the government steers industry back into peace it will be forced to finance many concerns wrenched far out of their customary routine by the war. By its control of the purse the federal authority may also demand continued concurrence in the labor policies inaugurated during the war. If firms whose financial standing enabled them to readjust without assistance opposed the government's labor standards, agreement might be reached by the government's refusal of raw materials until the standards were acknowledged.

So long too as the War Department has millions of men under its discipline and must devise a method of release that will be fair to men and industry alike, the continued government control of industry is necessary. The danger of simultaneous demobilization is so obvious that it is little likely to arise, but a gradual demobilization will be only a little less disastrous if the ex-soldiers are not discharged into a job instead of onto the street. The government must become a great employment manager; it has the records of each soldier's capabilities; it has the machinery for making use of this knowledge in the draft boards or the United States Employment Service; all it needs is accurate information as to where the labor can be most effectively applied. These facts can best be obtained if the government itself prescribes what shall be produced, where, by whom and in what quantities or qualities. The government in coöperation with states and cities might also provide "buffer employment" upon public work held up by the war but for which funds have been provided. If the government does assume the functions of a great employment manager, then it could easily lay down the terms upon which labor could be secured and retained, thus assuring to labor the privileges gained during the war. If it carries over into peace its war labor policies, it will discover prolific seeds of discord in its attempts to standardize wages and to extend the scope of the United States Employment Service.

It is expected that if wages were equal everywhere for the same work, competition would be confined to service, management and quality and not depend upon exploiting labor. The attempts to standardize wages during the war aroused protests from employers because they did not see any justice in forcing those in small

towns to meet the wage set by the higher costs of the city. Laborers, too, did not like to be pinned down to a standard in communities where they felt themselves strong enough to force wages to a high level. To these objections would be added the difficulty of setting up in peace time a standard product. In war the mills made the same articles, on the same specifications, for the same market, but the infinite variety of peace business would give ground for so many deviations in pay that a standard would be hard to set and harder to maintain and would probably become an ever present bone of contention.

During the war, the United States Employment Service was inaugurated to prevent excessive turnover of unskilled labor, and employers were compelled to use it exclusively. Since during the war the service could not entirely restrain manufacturers from enticing labor from each other, the first few months of peace will probably witness many more violations inasmuch as the incentive will be greater and the restraint less. This situation will produce its own measure of trouble. If in addition skilled labor is put under the service, the difficulty of determining the degrees and grades of skill will keep the storms going. There is a movement afoot also to make a physical examination a part of the Employment Service with the idea of better fitting people to their jobs. This reform when launched is certain to raise a whirlwind. Sentimentalists and organized labor will both oppose it; the former because they cannot bear to think of men being tested like metal—a foolish notion but popular nevertheless; the latter because they fear a physical test will be used by employers as a means of “blacklisting.” The service, however, is such an advance over private agencies that it ought to be aided to ride out all storms.

By no means all of the labor problems of peace are connected with the government control of industry; some are more intimately attached to organized labor. The conservative union leaders were in power during the war and rasped the radicals exceedingly by not taking a much fuller advantage of their position. The very success of unionism whetted the appetite of the radicals for extreme measures. Success, also, has bred autocracy. Certain leaders have become so dictatorial that their followers will seize the first chance to overthrow them. An attempt of this sort held up the shoe industry for weeks during the war, seriously

impairing the supply of shoes to the army. On the other hand, some local unions have so advanced in comfort and well-being that they resent the interference of national officers and chafe under restriction. Shipbuilders on the Pacific Coast and machinists in Bridgeport, Conn., were held in line in 1917 and 1918 only by the most drastic threats. The prestige of unionism is seriously impaired by such incidents, and whole localities are set in uproar. The germs of trouble are well sprouted within the unions and reconstruction controversies will provide an excellent culture for their growth, especially if the national officers are not strengthened by tacit or avowed government aid.

Organized labor, too, is not united into one universal federation. To be sure, the American Federation of Labor holds sway over most of the trades, but there are some notable exceptions. For example, in the clothing industry there are two organizations, namely the United Garment Workers, affiliated with the American Federation, and the Amalgamated Clothing Workers of America, a secessionist group of considerable strength. Before the war the feeling between these two was such that when war broke out it was impossible to set up in the clothing industry a board of mediation—as was done in other trades—having upon it a union representative. During the war the feud was not abated. Unless the breach is closed by a new policy of conciliation or unless changes in officials open the way for peaceful reunion, bitter clashes between these two unions cannot be avoided. Manufacturers also will not be averse to taking whatever advantage accrues to them by reason of this disaffection, adding fuel to an already surcharged flame.

Unions and labor in general, during the war, became so intent on wages that they forced themselves into an untenable position. Although wages must always advance with the cost of living regardless of production, nevertheless even with rising costs of living there comes a point in the rapid uptrend of wages beyond which further increases cannot be granted unless offset by greater service. Unfortunately war wages were not always accompanied by a production that warranted the price paid. For example, girls with little training were paid fifteen dollars a day or more for making overseas caps; cantonment builders received about twenty dollars a day; certain coal miners drew twenty-two dollars

a day;—yet in each case the workers struck for even higher returns. In each instance the employers complained that the increases in wages were followed by a *fall* in production. Labor must learn that extraordinary wages must be *earned*, for no employer can long afford to pay more for a service than he gets out of it. Certain economists might support the labor on the ground that the high wages come out of a surplus which belongs to the man who can get it; formerly swelling profits, it now inflates wages. The trouble is that we cannot compute the exact size of the surplus, and cannot estimate the relation between surplus and production per man. At any rate we can expect manufacturers to fight for their accustomed profits, and labor to struggle to hold its grip on a fat pay envelope.

The war gave us new practices in regard to government control and intensified many of the problems connected with unionism, but in no place did it so completely upset preconceived notions as in the field of women's work. The war gave the finishing blow to the old tradition that woman's only place was in the home. Our grandfathers saw the first attack on the fallacy when a few women tried to get a higher education and gain a career; our fathers witnessed the fall of the barriers that excluded girls from business positions; and now we mark the downfall of the custom that kept married women from gainful occupation. The "newest woman" does not make a choice between a husband and a career but wants both. The war-time employer having exhausted every other source of labor turned to the married women and appealed to their patriotism, their pocketbooks or their zeal for feminine advancement to get them to fill the gaps in industry. Special buildings, welfare work, machinery and hours were arranged in order that married women could coördinate their functions as homebuilders and breadwinners. Day nurseries, for example, were set up in the Connecticut brass and munitions districts in towns that had never heard of them before, and the American Woolen Co., of Lawrence, Mass., went further in granting recess twice a day to mothers during which they could go to the nearby nurseries and play with their own children. Neither employers nor mothers and wives will want to forego the advantages that this new employment grants. Given an opportunity it has been shown that sex is no more the determinant of what occupation a

woman should hold than it is in the case of men. *For both men and women the choice is a matter of individuals.* If this idea is accepted it means a great accretion to the labor force of the United States, and therein lies the kernel of trouble and the real cause for much false solicitude for the welfare of women workers.

Probably the immediate struggle against women's continued participation in industry will not involve positions requiring high degrees of skill or long training, but rather those formerly occupied by semi-skilled or unskilled men. Since many partly incapacitated soldiers will also be seeking this same type of work, much clamor may be raised to oust the women. If men fail in their selfish claims for priority they will then in all likelihood shift their attack to wages and try to compel employers to pay the same rates for the same work irrespective of the sex of the employe. Between these two campaigns the woman question bids fair to be the center of industrial dispute for some time to come.

Another social change instigated by the war and having as direct a relation to labor problems as the "woman question" is the industrial emancipation of negroes. Heretofore there has been little mingling of the white and colored peoples upon the same jobs, but the war gave the colored folk an unusually favorable opportunity. They advanced the argument that they had been thorough Americans for more generations than many of their white fellow-citizens; they paid taxes, bought bonds, supported war charities and gave their best sons in sacrifice to the war; they were good enough to die for their country so they ought to be good enough to work for it. This argument plus a vital need for every person willing to labor led to placing negroes in offices in responsible clerical positions and in shops at high grade machine work. The yoke that had held negroes in bondage to unskilled labor was at last lifted. It will require much sophistry to persuade negroes that they must give up their new jobs to white men or women when the war is over. Labor unions must face the issue of including negroes in their ranks and white workers must learn that democracy has a place in the factory or office as well as in international debate. Prejudice is so strong, however, that the negroes cannot hold their new found freedom without many a struggle and many a heartache. The battle in the industrial arena may be carried again into politics because having gained economic

equality the negroes may demand the political rights guaranteed by the constitution.

One of the great contributing factors to labor's power during the war was the shutting off of immigration. Enjoying its virtual monopoly, American labor will endeavor to continue it by seeking restrictive measures against immigrants. On the other hand employers will exert their power to regain a constant flow of immigrants, thereby hoping to loosen labor's throttle grip. This question must be threshed out in the near future here in America, but whatever action we take may be offset by conditions at the source of immigration. Legal restriction of emigration may counterbalance a free welcome at our ports. Economic conditions at home, greater opportunity or burdensome taxation may constrict or swell the volume of the human current pouring through our gates. If the stream is checked at its source American employers may look to new recruiting points. For example, 10,000 Porto Ricans were brought into the United States and 30,000 more were enrolled to come for construction work during the war; thousands of Mexicans were drawn into the mines of the Southwest and Chinese were imported to the Pacific states. If this type of immigration is encouraged because the older springs are dried up, a whole series of new problems confront us. Our relations with Porto Rico are already complicated by the complaint of planters against the withdrawal of their labor.

Causes for unrest lie in the relations between organized government and individual employes and employers, between organized government and organized labor, between men and women in industry, between white and black, and between native and alien labor units. As a final factor, machinery enters once more as an element in labor problems. Whatever forces tend to make labor scarce and high priced directly further the utilization of machinery. The Civil War was largely responsible for popularizing farm machinery and was the immediate cause for putting shoe manufacture upon a machine basis. Likewise, our latest war acted as a marked stimulus toward improving mechanical equipment. For illustration, the use of machines in mining was greatly advanced; mechanical conveyors replaced labor in many industries; machines were simplified and made more nearly automatic to permit women and untrained men to operate them.

By raising the price of labor and increasing labor turnover, the war rendered machinery economical, and by the enlarged profits of war business or by governmental underwriting, manufacturers were enabled to afford new machines. Since the labor scarcity made wages high even to operators of highly perfected machinery, the usual objection of labor to improvements was lacking. Even if wages fall now that war is over, the machines will stay in place because the capital charges have been defrayed and even the cheapest labor cannot compete with a free machine. Inasmuch as the machines have been perfected so they may be operated by a lower grade of labor, when the former skilled men come back for their jobs many will discover that theirs have vanished. This can hardly fail to arouse animosity and make the adjustment to peace doubly difficult. The strife over women in industry will also be intensified by the new machinery, because the inventions have made women available for work that formerly was exclusively masculine.

The whole reconstruction problem relative to labor is complicated by the question of politics. The degree of government control over industry will depend somewhat upon which party is in power; and the final disposition of the issues of organized labor, women in industry, negro uplift, immigration and the full use of advances in mechanism, will be contingent upon whether Republicans or Democrats hold the reins. In any event we will all need to exercise restraint, forbearance and wisdom in the labor problems that surely confront us in the days now at hand.

Measurement of the Cost of Living and Wages

By WILLIAM F. OGBURN

THE great upheaval in prices during the past two or three years has forced into the spotlight of public interest the standard of living as a basis of wage settlement. The cost of living has risen quite suddenly and most dramatically, and unless wages rose with the rise in prices the net result was an actual lowering of the standard of living. For this reason the standard of living has become in a great many cases the basis for setting wages.

Thus the Shipbuilding Labor Adjustment Board has on three occasions raised wages to the extent that the cost of living has risen, having done so on each occasion only after an extensive survey and measurement of the increased cost of living has been made. The National War Labor Board in nearly every case that has come before it for settlement has considered evidence and testimony on the increased cost of living. In perhaps half of the cases they have made a settlement of wages directly on the basis of the increased cost of living, and in many of the cases specific provision has been made for the future readjustment of wages on the basis of changes in the cost of living. The Railroad Wage Commission based a recent raise in wages on the results of a special nation-wide survey into the extent that the cost of living had risen. A number of private employers have raised wages after having had special studies made to determine the extent of the increase in cost of living. A few companies have made provision for periodic (in some cases monthly) increases of wages, in accordance with the percentage increases in the cost of living. Some of these companies are the Bankers' Trust Co. of New York City, The Index Visible (Inc.) of New Haven, Conn., the Oneida Community, the Kelly-How-Thompson Co. of Duluth, Minn., the George Worthington Co., and the Printz-Biederman Co. of Cleveland.

During the period of reconstruction following the war, if prices should continue to rise, there will be further adjustments of wages on the basis of rising prices. If, on the other hand, prices fall, it is certainly very desirable that wages should not fall more than

prices. In either event the changing cost of living will be a prime factor in determining wages, and during the period of reconstruction, social and industrial conditions are likely to be such as to need the guiding hand of a strong public policy. Such a public policy must surely consider the standard of living in any directing or control it may employ on the course of wages.

This enhanced importance of cost of living as a factor in wages occasioned by the war and reconstruction, makes it quite desirable to set forth not only some of the facts of recent changes in the standard of living, but also some of the concepts involved which are not wholly clear to the general observer. Furthermore, as the setting of wages by standards of living depends upon the accurate determination of the standard of living, it is also desirable to show something of the technique that has recently been evolved for measuring this complex phenomenon. For only by such knowledge can the issue thus raised by demobilization be met.

In June of 1918 the cost of living had risen around 55 per cent over the pre-war period. I have spoken of June of 1918 as a point of measurement, because a number of studies were independently made of the increase in the cost of living up to approximately this time, and thus there was not only abundant evidence on the increase in the cost of living but the results were in considerable conformity as to the exact percentage of increase. These studies were made by the U. S. Bureau of Labor Statistics, by the Shipbuilding Labor Adjustment Board, by the Railroad Wage Commission, by the National Industrial Conference Board and by the National War Labor Board. Since June, 1918, the measurement of cost of living has been carried on by the U. S. Bureau of Labor Statistics in various localities. These results of the bureau are not yet fully tabulated, but upon the basis of data collected in fifteen shipbuilding centers for August, 1918, the average increase up to that time over 1914 was 65 per cent.¹

These figures are not based on wholesale prices, which fluctuate somewhat more widely than do retail prices, nor on food alone, which is only about 40 per cent of the budget, but are based upon food, rent, fuel and light, clothing and sundries. The increased

¹ The increase in cost of living for New York City up to December 1918 (over December 1914) has been computed and is 75 per cent.

cost of living is found by combining the increased cost of each of these five classes of expenditure, after the increased cost of each class has been weighted according to its relative importance in the budget.

The increase in the price of food is found by taking an average of the increase (or decrease) in some thirty or forty articles of food, each weighted according to the amount spent on it. For a particular locality, prices of each article are taken from eight or ten stores. Food in October, 1918, has increased 75 per cent over the average price for 1914-1915.

The increase in rent for a town or city is found by taking a sample of from 500 to 2,000 houses or apartments, located proportionally in all the districts where workingmen live and finding the average change in rent of these dwellings over the period studied. The increase in rent has not been so rapid nor so great as the increase in most other items of the budget. The changes in rent vary widely from locality to locality. Thus in Detroit from December, 1914, to March, 1918, rent increased 38 per cent, while in Jacksonville from December, 1914, to August, 1918, rents fell one per cent.

The problem in measuring the increase in fuel and light lies chiefly in weighting the changes in price according to the extent that each type of fuel and light is used by the community. In general the increase in coal and wood has been nearly the same in most areas, while changes in rates for gas and electricity vary somewhat by locality. Gas and electricity have usually not changed so much in price, increasing by no great percentage and in rare instances falling slightly. From December, 1914, to August, 1918, fuel and light have increased from 25 per cent to 45 per cent, in most cases being near the latter figure.

Clothing has increased to the greatest extent of any general class of expenditure, ranging from 125 per cent to 70 per cent over the pre-war period to August, 1918, in general the increase being around 95 to 100 per cent. The increase in the price of clothing is measured by getting the prices on about seventy-five articles of clothing used by various members of the family from eight or ten stores in the locality, in each store getting the prices if possible on four or five leading sellers representative of each article of clothing. The increases over the period studied for each of these articles of

clothing are then weighted according to the amount spent for them by the average family, and the average increase is then found.

Sundries include expenditures for insurance, organizations, furniture and furnishings, education, amusement, sickness, car-fare and various miscellaneous expenditures. The increase in sundries is most difficult to get because of the difficulty of getting proper weights and enough large samples for each locality. Most of the studies made have not measured the increase in sundries adequately. From the few careful studies made of changes in prices of sundries, it seems they increase at about the same percentage as the total of the items of the budget.

Some idea of the variation in the increased cost of living in different localities can be had by noting the following figures for the increased cost of living in various shipbuilding centers from December, 1914, to August, 1918, made by the U. S. Bureau of Labor Statistics: Baltimore, 80 per cent; Norfolk, 75 per cent; Bath, Me., 68 per cent; Philadelphia, 67 per cent; Portsmouth, N. H., 67 per cent; Chicago, 65 per cent; Boston, 65 per cent; Jacksonville, Fla., 63 per cent; Portland, Me., 63 per cent; Toledo, Ohio, 63 per cent; New York, 62 per cent; Superior, Wis., 60 per cent; Beaumont, Tex., 60 per cent; Savannah, Ga., 58 per cent; Mobile, Ala., 56 per cent. Perhaps more variation is shown by these figures than really exists, because the month of August is an unsatisfactory month to get prices in, as in some cities the autumn prices are quoted and in others the prices of a former season are quoted. Thus when the month of January, 1918, was taken as the point to which to measure the increased cost of living from December, 1914, the variation was only from 40 per cent to 48 per cent for fifteen shipbuilding centers. In shipbuilding centers and localities doing large amounts of war work, perhaps the increase is slightly greater than in other cities, because in many of these centers of war industries, rent has increased more than in other places. Of course most cities have been doing some war work and this difference in rent must not be unduly pressed. The rise in food, clothing, fuel and certain sundries seems to be general irrespective of locality.

In this manner, then, the increased cost of living has been determined for a definite period and for particular localities for the

purpose of increasing wages by the same percentage of increase that the cost of living has shown, thus enabling the same standard of living to be maintained. But in a number of cases this process of raising wages has been unsatisfactory because it is claimed that the standard of living in the pre-war period which was used as the basis for computing an increase was too low. And certainly a number of American wage-earners were endeavoring to live on less than a minimum of subsistence in the pre-war period. The problem then becomes one of determining what is a proper standard of living. To raise wages according to the increase in the cost of living is in some cases not an adequate method of setting wages, and in these cases wages can be settled satisfactorily only by considering the standard of living as well as the increased cost of living.

The problem in such an event then is to determine the proper standard of living. Up to the present time attempts have been made to measure three different levels of living.

The first of these is what might be called the poverty level and for which there have been drawn a number of budgets, principally by various charity organizations and philanthropic societies. Families living at this level receive charity in the form of gifts or free medical service or in other ways. Or if they do not do this they attempt to live on a level so low as to weaken them eventually to such an extent that disease inevitably overtakes them.

The level above the poverty line is called the minimum-of-subsistence level. This level varies of course from country to country. It is spoken of here as the American standard, it being realized that it varies somewhat in different parts of an area so large as the United States. The minimum of subsistence will also change over a period of time, irrespective of the level of prices. What was the minimum of subsistence a number of years ago is certainly not a minimum of subsistence now. Quite a number of budgets have been set for this level in previous years. The study made by Dr. Chapin in New York in 1907 set such a level. Another was the budget of the New York Factory Investigating Commission in 1914. Such a standard of living corresponds approximately with that of common or unskilled labor, and is what is generally referred to as a living wage.

There has also been a tendency to recognize still another level

which has been called the minimum comfort level, which is of a plane somewhat higher than that of the minimum of subsistence. Thus in the autumn of 1917 in Seattle the arbitration board in a strike of the street railway employes accepted a budget of \$1,500 for a family of five. The settlement was made on the basis of a budget, drawn after considerable study, and called the minimum comfort budget.

The poverty budget at the charity level is chiefly of concern to charity organizations, and it is hoped that less and less attention will have to be paid to this type of budget. On the other hand, the budget at the level of the minimum of subsistence is of the utmost importance because it determines the line below which American families ought not to be allowed under any circumstances to sink. In some localities, sufficient careful study has been made of the minimum of subsistence by various students to lend considerable confidence to the accuracy of their results. Thus, in 1907 in New York City, Dr. Chapin after a very careful study said, "An income under \$800 is not enough to permit the maintenance of a normal standard. An income of \$900 or over probably permits the maintenance of a normal standard, at least as far as the physical man is concerned." For 1914 in New York City the New York Factory Investigating Commission set a minimum-of-subsistence budget at \$876. And in 1915 the Bureau of Personal Service of the Board of Estimate and Apportionment of New York City made a minimum budget estimate for an unskilled laborer's family in New York of \$845. These budgets therefore approximate the minimum of subsistence for New York City before the present great increase in the cost of living, which was first markedly noticeable in the late summer of 1915. If the minimum of subsistence in pre-war times was between \$850 and \$900 for a family of five, what is it now since the great upheaval in prices?

A good deal of investigation has been made on the problem of what is a minimum of subsistence in America today by the cost-of-living department of the National War Labor Board. In the early summer of 1918 this level was described by a budget drawn up item by item. This budget was based largely on data collected by the U. S. Bureau of Labor Statistics, and was worked up in consultation with various experts. This work showed that for a family of five to maintain the minimum of subsistence in a large

eastern city in June of 1918 an income of \$1,380 was necessary. Approximately this estimate was confirmed by a totally different method of approach, namely, by applying the percentages of increase in cost of living to well-recognized budgets worked out in former periods. The increase in food, in rent, in fuel and light, in clothing and in sundries was added to the estimates in former budgets, and so brought up to date. Thus, Dr. Chapin's budget for New York City in 1907 would cost in June, 1918, \$1,390. The budget of the New York Factory Investigating Commission would cost \$1,360 and that of the New York Board of Estimate would cost \$1,320. It is possible to use still another method of estimating the minimum of subsistence. In minimum-of-subsistence budgets food usually costs about 44 per cent of the total, so if we know the cost of food we can estimate the total budget. The U. S. Bureau of Labor Statistics collected 600 dietaries in the New York Shipbuilding district, which cost on the average \$607 a year, the families averaging 3.6 equivalent adult males. Upon analysis this average dietary based on 600 cases yielded only 3,155 calories per adult per day, not allowing anything for waste. So if we consider \$615 as the cost of food per year for a family of 3.4 equivalent adult males, we get a total budget of \$1,390. It seems fairly clear then that in June, 1918, the minimum of subsistence for a family of five living in a large eastern city was from \$1,350-\$1,400. If the cost of living since June, 1918, to the present time (November, 1918) has risen 10 per cent, then the minimum of subsistence at the present time costs about \$1,500 for a family of five in a large eastern city.

Not very much attention has been given to standards of living above the subsistence level for the purpose of setting wages. But the department of the National War Labor Board on the cost of living drew up for the consideration of the board a budget above the subsistence level which was called the minimum comfort level. In June, 1918, the cost of this budget was \$1,760 per year for a family of five. These facts will give the reader fairly good ideas of various levels of the standard of living since the great change in prices.

The importance of the standard of living as a factor in determining wages during reconstruction will probably occasion a good many attempts to define and measure the standard of living in

various industries and in various parts of the country. Such a probability makes it desirable here to develop somewhat the concepts involved in the standard of living and the method of determining proper standards.

The general reader is not at all times fully aware of the following concepts. A standard-of-living budget for wage-earners is thought of by some, and erroneously so, as fitting a particular individual family rather than an average family. But budgets for the purpose of wage adjustment are drawn not for a single family but for a group of families. Hence the items of a budget should be average items. Thus in a particular community the men in some families will ride on the street car twice a day for every work day in a month. Men in other families will not ride to and from work at all. So an average budget for such a community might put down expenditures of the man for car fare for thirty car rides a month, although no man in any family would ride exactly this number of times a month, no more and no less. It is rather an average expenditure of those who ride to work and those who do not. Similarly, the number of suits of clothes bought per year might be expressed in fractions. Items of expenditure are therefore generalized. It follows from the above analysis that items of expenditure should not be set at the lowest possible figure for an individual but for the group as a whole. Thus some men may need only 2,500 calories a day while some will need 6,000 calories, the average for a man at moderately hard work being probably 3,500.

Another conception necessary for a clear understanding of setting wages by constructed budgets is that budget estimates must not be ideal. It cannot be assumed for instance that a housewife has the expert training of a domestic science expert. Nor should budgets be constructed without an allowance for tobacco, when we know that it will be impossible practically for a community to live according to such ideal rules of expenditure. On the other hand it seems questionable whether such constructed budgets should conform absolutely to practice. The expenditure in actual practice will be a function of the income received and as the income is what we want to determine, there is danger of getting in a circle. For instance, families of a group of workmen may spend only \$18 a year for sickness; whereas they should spend more, as

we know from data gathered in sickness surveys that they need to get more medical attention than \$18 will buy. Budget estimates, however, should conform fairly closely to practice.

Budgets are usually constructed for a family of husband, wife and three children. This custom is justified on the grounds that public policy should encourage early marriage and that to prevent the population from decreasing, at least two children should be reared to parenthood.

Formerly budget estimates included chiefly food, rent, fuel and light, and clothing; other items were neglected to a great extent. Food, shelter and warmth were thought of as the minimum of subsistence. We now know that food, shelter and warmth are not the only necessary needs. And so considerable attention is being paid to other items of expenditure in budget making. For instance if we find large numbers of families who do not get enough food and who do not get medical attention when sick, yet frequently attend moving picture shows, the proper conclusion would seem to be that recreation is a necessary need as truly as food, and we know that in American life recreation costs some money. Hence expenditures for recreation should be written into a minimum-of-subsistence budget. And so it is with sundry items.

To some persons not familiar with budgetary studies, the determination of the level of subsistence seems a matter of opinion rather than of science. But there are many scientific approaches to the problem and various ways of eliminating the personal bias. This method cannot be gone into at length here but some of the devices used for locating the point of subsistence may be set forth briefly.

The food requirement can be found by subjecting to food analysis a number of actual dietaries. The cost of that dietary actually used which furnishes the requisite number of calories, grams of protein and the necessary chemical constituents will be set as the minimum amount of expenditure for food for subsistence. The amount for rent can be estimated by selecting a standard house of, say, four or five rooms with bath and finding the average rental for various localities in the community. Or if a number of budgets have been collected, the minimum rent may be determined at a point where overcrowding ceases to exist, hav-

ing determined some standard for overcrowding, as for instance one or one and one-half persons to a room. Perhaps a fair method of determining the fuel and light necessary is to compute for various types of heating apparatus in houses of a certain size the amount of fuel and light used by families that are known to be just above the poverty level but clearly so. The minimum of subsistence in clothing is perhaps most difficult to determine. The usual procedure is to adopt a certain estimate of clothing upon which there has been a fair amount of agreement, such as one overcoat every three years, one hat a year, one cap a year, one suit of clothes a year and so on. At this time of changing prices it is difficult to express these units in price terms which will show agreement. If a number of family schedules have been collected, it is possible to locate a point where the expenditure of clothes for the wife is say 75 per cent of the expenditure for the clothing of the husband, or some such point agreed upon. It is known for instance that when the clothing allowance is too low, the expenditure for the wife's clothing is only a small percentage of the expenditure for the husband's clothing, and that when the allowance for clothes is bountiful that the expenditure on the wife's clothing equals or exceeds that for the husband. There is no general rule for determining the amount necessary for sundry expenditures. The amount for car fare is broken into three classes, that necessary for the husband to spend in going to and from work, that necessary for children to go to and from school, and other car fare; in this way the amount can best be approximated. The amount for sickness can be estimated from a study of the average number of days of sickness a year. There are also various ways of getting expert testimony on the amount of insurance necessary. And so one can set a minimum standard throughout the items of the budget.

Considering the budget as a whole, there are various guide posts that readily tell when the poverty line is passed. Usually, gifts of clothing are indicative of poverty. So also, the method of obtaining fuel, known as "gathering fuel" is often an index of poverty. The point also at which the family ceased to be in debt is significant. Thus in the District of Columbia in 1916 families with incomes lower than \$1,150 were on the average in debt. Usually all these various tests converge upon a particular income and this is spoken of as the minimum-of-subsistence standard.

Formerly, budgets determining standards of living were expressed only in prices. Now, however, at a time when prices are changing very rapidly, a budget expressed in prices is not very intelligible and will be less so the further back the period which it represents. The need is therefore quite manifest for a budget expressed in quantities as well as in prices, and the items should be described also as fully as possible. It is greatly to be hoped that future budget studies will be in terms of quantities adequately described. Furthermore, the more fully a budget is described, the more accurate is the measurement.

Enough has been indicated to show what sort of measurement is necessary if the standard of living is to be used in wage settlements. A budget study of a particular community is quite a difficult undertaking, involves considerable technicality and is quite expensive. In a country as large as the United States and possessing so many localities where wages may be adjusted on the basis of the cost of living, it is an impossible undertaking to make a budgetary study in every community. It would seem that such a difficulty could be met by estimating the cost of living in a city for which we have no budgetary study and by finding the price differential from a city for which we have budgetary studies. In the wage adjustments of the National War Labor Board during the war a very great need was felt for some quick method of determining the differential in cost of living between one city and another. For instance, the wage may have been set in Philadelphia for street car employes on the basis of the cost of living. It is also desirable to set wages in New Orleans for street car men, but there is no cost of living study in New Orleans. It would be much simpler and easier to set the wages in New Orleans if such a differential were known.

But so far there seems to be no quick way of telling how much less it costs to live in New Orleans than in Philadelphia, except by full budgetary studies. It would seem that the way to measure this differential would be to get the prices of an extensive list of commodities such as food, clothing, rent, etc., in Philadelphia and in New Orleans, and the average difference in prices will be the differential in living costs between the two cities. The difference between the prices of the identical commodities between the two places would be very slight indeed. But if determined it would

only mean the difference in prices and not the difference in the cost of living because of differences in habits of living. For instance, the dietaries in New Orleans are quite different from those in Philadelphia. The same articles of food would cost on the average about the same in the two places; but a dietary yielding just as many calories in New Orleans as a different dietary would yield in Philadelphia apparently will cost considerably less. Similarly so simple a differential to measure as rents may be nevertheless difficult to determine, the type and size of house in New Orleans being quite different from that in Philadelphia. There are climatic differences which affect standards in consumption of fuel. Also common brands of clothing between the two places are very few. So it is very difficult to estimate differences in cost of living between two places without making full budgetary studies. As the difference in cost of living between any two places is in most cases small, the error in rough approximations is too great. Probably the best way to handle this problem is to have very careful budgetary studies made in representative localities in representative districts, as for instance in small towns, large towns and large cities in the various geographical areas, and to use the differential thus carefully determined as representative of other differentials. This the U. S. Bureau of Labor Statistics is engaged in doing at the present time.

This point is extremely important in forming any really national policy on wages. At the present time there are considerable differences in levels of wages in different parts of the country. Some observers justify these local or territorial differences by saying that the cost of living is quite different in these areas. Others on the other hand reply that the differences in the cost of living in the various areas are different because wages determine the cost of living and that a uniformity in wages would bring a uniformity in living costs. They say that the identical standard of living prices in the various territorial districts would be very nearly the same in cost in all localities. Obviously such a problem as this should be solved before a satisfactory national policy in regard to wages can be declared. The Railroad Wage Commission and the Shipbuilding Labor Adjustment Commission, both handling wages on a national scale, have been confronted with this problem. In general their findings have been that the differences

in the cost of living in various parts of the country are not so great as are popularly supposed.

In conclusion, then, it must be recognized that there are various determinants of wages, supply and demand, productivity and the standards of living; and these are variously interrelated. In a period of laissez-faire conditions, supply and demand operate particularly strongly. But with the development of social control and the growth of social justice, the standard of living plays a large part in the determination of wages. This has been true particularly during the war because of the increase in prices and the necessity of a high degree of social regulation and control. During the period of demobilization and reconstruction, the standard of living should be equally as important in national consideration. For the gains of democracy, whether it be political or economic in the last analysis, certainly come down to one important base, the standard of living. The standard of living must also be very seriously considered in formulating any national policy in regard to wages. The importance of the standard of living in the adjustment of wages then has been the reason for setting forth in this paper the definition of important concepts involved, something of the technique of measurement recently evolved and also a few of the more important facts in regard to the extent in the rise of the cost of living and the present levels in the standard of living.

Wages for Women Workers

By MARY ANDERSON

WOMEN are doing their share of our country's work under many new conditions and it therefore becomes a national responsibility to see that they are not sacrificed or exploited.

EQUAL WORK, EQUAL PAY

Women's wages should be determined in the same manner as men's wages. As Miss Mary Van Kleeck, Director of the Woman in Industry Service of the Department of Labor has well said, "Wages should be determined on the basis of occupation and not on the basis of sex." Women doing the same work as men should receive the same wages with such proportionate increases as the men are receiving in the same industry. Slight changes made in the process or in the arrangement of work should not be regarded as justifying a lower wage for a woman than for a man unless statistics of production show that the output for the job in question is less when women are employed than when men are employed. If a difference in output is demonstrated, the difference in the wage rate should be based upon the difference in production for the job as a whole and not determined arbitrarily.

During the period of the war, employers have been outspoken in their praises of women's work. They have said very truthfully that the women who have taken men's places have been just as efficient and in many instances have done more and better work than the men whom they replaced or those with whom they worked side by side. But their attitude on wages has been curiously illogical.

For example, in one city a manufacturer with very important war contracts wanted to employ women for night work. In that state the law forbids the employment of women between the hours of ten p.m. and six a.m. The employer gave as his reasons for urging night work that women were far better workers than men, that they did more work and better work and came to the factory with greater regularity, that he had a night shift of men

who were very inefficient and most of whose work had to be thrown on the scrap pile.

A casual inquiry was, "How much are you paying an hour for this work?"

"Oh," was the reply, "we are paying the men forty cents an hour with a fifteen per cent bonus for night work."

Another question was, "How much are you intending to pay the women for working at night?"

Answer: "We will pay them twenty-five cents an hour."

The query went forth again: "You have said women are more efficient than the men and that they do more work and better work. Don't you think that they ought to receive the same pay that these very inefficient men are getting?"

Reply: "But women have not the same family responsibility that men have."

Question: "But do you know how many of your men employees have family responsibilities?"

Reply: "Some do and some do not."

The same question was asked as to the women. He said that he had in his employ widows who had children dependent upon them and he admitted that girls probably had the same responsibility toward their families that young men have. "But," he said, "the manufacturers in this city are not paying the same wages to the women as to the men. If they did, it would bring on a revolution."

He was asked, "Have the employers an understanding that equality shall not prevail as to wages for men and women?"

His answer was, "Yes."

Statements are frequently made by employers that they are paying the same wage for the same work to women as to men. No doubt in many cases this is literally true, but more often the statement will not bear analysis. For example, one company, which is using women to do heavy hauling, claimed to be paying women the same money as the men, giving the rate as thirty-two and one-half cents an hour, but at the time the statement was made the rate for men was from forty to forty-two cents. Another statement, which is probably more typical, comes from a lumber operator who says, "The women receive the wages *formerly* paid to men for the same work." Paying women a wage at which men

would not be available at the time is not in any sense equal pay for equal work.

The waitresses of a big middle-west city report similar discrimination.¹ The waitresses' union had difficulty this year in signing up its contracts. The contracts contained a clause stating that where women were employed to take men's places and were doing an equal amount of work they must be paid an equal wage with the men. The employers admitted that they intended to fill vacancies left by men with women, that the work would be just the same for the women as for the men, and that they expected to get these women workers for three dollars a week less than they were paying the men. The secretary of this union was one day arguing the matter with a young man who manages a chain of restaurants.

"Supposing I should take your job," she said. "You know you are in the draft and you know, too, that I could take your place very nicely. How would you like to go away to war knowing that I was doing your work for a half or two-thirds the wages you are now getting? You would know for a certainty that when you come back from war you might get the job back, but you would get it back at my wages and not at the wages you are getting now. How would you like that, after you have made the sacrifice to go for the sake of your country? What kind of a patriot would I be to take that job and what kind of a patriot is the owner of your restaurants to try now to do this thing?"

Several departments of the federal government have taken a clear and definite stand on the question of wages for women. Director General of Railroads, McAdoo, issued the following order in May, 1918, affecting the employees of 164 railroads of the country:

When women are employed their working conditions must be healthful and fitted to their needs. The laws enacted for the government of their employment must be observed and their pay, when they do the same class of work as men, shall be the same as that of men.

The following statement is made by the Bureau of Labor Statistics of the United States Department of Labor:

The great danger from the viewpoint of health is that the employment of women should be resorted to merely in order to obtain cheap labor. As a matter of public health we must see to it that women are paid equal wages for equal work. Otherwise, their employment can be and is daily being made the excuse for undercutting the standard wages of men and so reducing the standards of living in the community. It is true that in many of the new occupations the women are unskilled and need training. Yet even while they are being trained, they should as a matter of health be paid an adequate wage.

ARGUMENTS AGAINST WAGE INCREASES THE SAME FOR MEN AND WOMEN

Employers will advance the same arguments against wage increases for women that they have long used in opposing the demands of men workers. They will claim that regardless of the es-

¹ From "Women's Work and the War," July, 1918.

sential fairness of any wage increase that might be asked by the workers, the financial condition of the business will not stand the burden of a higher labor cost and that great consideration should be given to this fact; that it should, indeed, be the only factor in determining whether an increase should be given. However, a careful inquiry into the profits will often show that there is a large overhead expense, such as dividends paid in the form of large salaries, or dissipation by wasteful methods of the profits, leaving no money for increasing wages. The only way to obtain a thorough knowledge of what an industry can or cannot stand in the way of increased labor cost is to refer the whole matter to a court of arbitration.

In the arbitration of questions concerning wages and hours in the packing house industry, the packing firms did not give the usual testimony that the profits of the industry will not warrant a substantial increase in wages or that the highly competitive nature of the business would forbid the change. Obviously, this was because the workers and the people had been reading of the large dividends in this industry. The lawyers for the firm, in summing up the case, begged the arbitrator to have in mind, in considering this question, that granting this increase would create unrest and dissatisfaction in other industries paying less than the packing houses' employees would be receiving and, therefore, an increase should not be granted. The result of the arbitration was the establishment of the basic eight-hour day with time and one-half for overtime, double time for all work on Sundays and holidays, the same rate of pay for eight hours as was previously paid for ten hours with an additional increase in the hour rate and piece rate. Thus order instead of chaos was established in the packing industry.

Another claim frequently urged by the employers is that the amount of increase in wages adds directly to the expenses of the business and, therefore, automatically results in reduction in profits. This claim is based upon the assumption that the employer will have to pay a higher price for the same quality and the same amount of work that he obtained under the lower wage scale. That this assumption is erroneous has been conclusively proven by generations of industrial experience. Workers whose wages are low, hours of work long, working conditions poor, who

must submit to ill treatment and constant nagging by the men and women directly in charge of the work, can render only poor and inefficient service. Those who are adequately paid and thereby better nourished, who have shorter hours which means lessened fatigue, who have self-government through shop committees and the right to take up the grievances that constantly arise between the foreman or forelady and the workers, do work of better quality and produce a greater output. Experience has proven that increases in the amount of the output and its improved quality entirely offset the increase in wages. This is illustrated in the case of Hart, Schaffner, and Marks, a large clothing firm employing about 8,000 people of whom about 63 per cent are women. During the first two years of the agreement between the firm and the union, wages had increased from 25 to 80 per cent, and at the same time profits were doubled. This was due to the increased efficiency of the workers which decreased to a large extent the need for sub-foremen and examiners and increased the volume of business because of better workmanship.

Some of the largest of our industries have voluntarily made large increases in wages against the protest of business competitors and associates who predicted that the effect would be the financial ruin of the industry. The practical results, however, completely refuted these predictions, for the expense per unit of production was very much decreased as a result of better service rendered, and profit to the employer showed the corresponding increase.

Another beneficial result of paying adequate wages that should be mentioned is the immediate decrease in the "labor turnover" which means the constant hiring of large numbers of workers to take the places of those who leave. The greatest number of employes leaving their place of employment can be found without a doubt in the establishments where wages are so low that men and women cannot maintain themselves and their families in health, thereby becoming a charge upon society as a whole through the medium of charitable organizations, in order to supply the difference between their actual wage and a living wage. This can at its best be done only in a very meager way for a limited time. It is conceded by all enlightened employers of labor that there is not only a large cost in constantly training people in an industry, but that there is also a decided reduction

of product due to the continuous introduction of new and untrained workers. This very expensive process could be eliminated if the money and time spent in "hiring and firing" and training could be added to the wages of the employees.

Captain Boyd Fisher, who conducted courses of employment management for the United States Government, says:

One of the basic remedies for high labor turnover is the payment of an adequate wage. . . . By an adequate wage I do not mean the minimum wage. I mean a good fat wage. One that will clothe and educate their children as well as feed them properly.

HOW TO HANDLE WAGE QUESTIONS AFFECTING MEN AND WOMEN

Wage questions affecting both men and women can best be handled by collective bargaining and by arbitration. The combination of these two methods means the application of sound democracy in the workshop. No one knows better than the trade unionists that the average wage-earner has had very little control over the conditions of his or her life, especially over that part of life which is the core of all the rest, the job. Collective bargaining means that the workers have got together, have elected their committee, let us say, have sent this committee to the employer, have been told there is nothing to discuss. The committee suggests arbitration. They are told there is nothing to arbitrate. The workers begin to understand that in industrial democracy they have no representation, that there is not actually industrial democracy. The National War Labor Board, by proclamation of the President, instituted collective bargaining in many cases where there was no organization. The first principle reads: "The right of workers to organize in trade-unions and to bargain collectively through chosen representatives is recognized and affirmed. This right shall not be denied, abridged, or interfered with by the employers in any manner whatsoever." It is becoming clearer and clearer to all thinking men and women that we cannot have real democracy unless we have democracy in the workshop.

The arbitration policy that I am most familiar with is that instituted by the Boot and Shoe Workers International Union more than twenty years ago. It has been very successful, so much so that Brockton, Massachusetts, the largest shoe center in

this country, has had no strikes or lockouts since this agreement was signed. The first firm that entered into this arbitration agreement was the W. L. Douglas Shoe Company of Brockton, Massachusetts, about twenty-one years ago. Many shoe firms, both in Brockton and other localities, have entered into similar agreements because they have seen the results of this policy of peace. Employers know that during the life of the agreement there will be no strikes and the employes know that there will be no lockout by the firm. They know that wages, hours of work and other working conditions which cannot be mutually agreed upon will be submitted to arbitration, and the decision that is reached will be final and binding upon the employer, the union and the employes.

For years, many people have thought of shortened hours of labor and of increases in wages from the standpoint of its meaning a few more dollars on pay day, and another hour or two that would not have to be spent in the factory. It is time to look at both of these as something more than a few more dollars on pay day and another hour or two out of the factory. It is something more than that. Wages determine life,—the standards of living, the health of body as well as of mind. The wages received determine where the worker shall live, whether in one room or two, in a cheap and crowded tenement district or in a home with pure air and sunshine. Wages will determine what kind of food can be had for families and that in turn determines the quality of children and the future citizenship.

Health Problems of Industrial Workers

By JOHN A. LAPP

HEALTH problems in industry have been freely discussed during the war period and some preliminary standards have been defined and partially applied. Beginnings have been made which promised much for the solution of some vexed labor questions. How much good will finally result now depends upon the way the temporary experiences are moulded together into a permanent labor policy.

Health problems were forced upon the attention of the country by the national exigency. Immediate war needs required maximum production on the part of every industrial agency. It soon became evident that this level of production could not be reached or maintained except by the physical fitness of every unit. For the first time in generations man power was valued at its full worth. The old system under which men disabled by sickness or accident were scrapped and new men took their places, rapidly broke down. A "new industrial day" came for the worker. He was raised to the level of the machine on which he worked. Clear-headed people saw that the provision for care must be extended to keep the worker fit, just as care had always been extended to keep the plant machinery in the best running order and the dumb beasts well fed and efficient.

Herbert Spencer said more than a half century ago:

Not only is it the event of a war often turns on the strength and hardiness of the soldiers, but it is that the contests of commerce are in part determined by the bodily endurance of producers. Already, under the keen competition of modern life, the application required of almost everyone is such as few can bear without more or less injury. Already, thousands break down under the high pressure they are subject to. If this pressure continues to increase, as it seems likely to do, it will try severely all but the soundest constitutions.

Dr. Victor Vaughan said more recently:

That government is the best which secures for its citizens the greatest freedom from disease, the highest degree of health and the longest life, and that people which most fully secure the enjoyment of these blessings will dominate the world.¹

Prof. Thomas Nixon Carver expressed more exactly the national significance of working power:

¹ *Commemoration Volume*, A. M. A., 1915, p. 3.

The most valuable resource of any country is its fund of human energy, that is, the working power, both mental and physical, of its people. It is safe to say that any capable race of men who will conserve, economize and utilize that fund will be able not only to extract a living but actually to prosper in the midst of poor natural surroundings. On the other hand, if they fail to economize their fund of energy, if they waste and dissipate it, they will certainly decay in the midst of the richest geographical and material resources.

With the return of peace and the demobilization of labor, there is danger that we may revert to the old standards and begin again our progress along the weary road toward industrial health. There are some clearly marked milestones, however, which will stand as guides.

FATIGUE AND THE EIGHT-HOUR DAY

The English experience carefully sifted and preserved in parliamentary reports and in laws and rules, shows clearly that the eight-hour day is a health measure which pays. The idea had long been maintained but it is now moulded into fact in the crucible of war. A nation needing maximum production for the life and death struggle in which it was engaged, found that the best results were obtained by shortening the hours of labor. America followed suit and during the brief time in which industry was keyed up to the maximum pitch, the eight-hour day was rapidly applied, voluntarily by employers and involuntarily under orders of the War Labor Board.

Fatigue, the cumulative result of excessive labor, is a health hazard of the first magnitude. Speaking of the physical fitness of the worker, Dr. Frederick S. Lee said:

From the standpoint of industrial physiology the industrial worker is looked upon as bringing to the general physical equipment of the factory his own bodily machine, the most intricate of all the machines used in the plant. This machine must be understood, it must be constantly watched, it must be used intelligently, and it must not be abused. Like other industrial machines it can be worked at different speeds, but unlike other industrial machines it cannot be worked for an indefinite period, because it is subject to the limitation of fatigue. Fatigue delays work, diminishes output, spoils goods, causes accidents and sickness, keeps workers at home, and in all these ways is an obstacle to efficiency. How fatigue can be kept down to its lowest reasonable limit, how the working power of the individual can be maintained from day to day and from week to week and be made to yield a maximum output without detriment to itself and to others—in other words, how the human machine can be used so as to obtain from it the most profit—constitutes one of the great industrial problems of the day.²

² U. S. Public Health Reports, Vol. 33, No. 2, January 11, 1918, p. 30.

HOUSING AND HEALTH

Standards of health in industry cannot be effective unless decent living quarters are provided. Any benefit accruing from carefully equipped shops may be entirely dissipated by the workers' unwholesome environment in leisure hours. The causes of disease are distributed between the individual, the industry, and the community and home environment. An exhaustive investigation by the U. S. Public Health Service in Cincinnati in 1916 showed this clearly in the case of tuberculosis. Among 442 persons suffering from tuberculosis, industry was charged with 18.1 per cent; poverty and housing 9.7 per cent; personal vice with 10.8 per cent; heredity with 32.4 per cent; other diseases with 8.4 per cent and indeterminate with 20.6 per cent. All investigation and experience tend to show a constant relationship between mortality, morbidity, and living conditions.

The remedy must be coöperative and social. Private enterprise cannot solve the problem of furnishing suitable places to live at a price the worker can pay. Insanitary housing must be prohibited. So long as hovels are allowed to stand, people will be found to exist in them. Nor can the worker expect to own the place in which he lives. It is impossible for him to do so in most cities. It is inadvisable for him to do so unless the conscienceless profiteering which takes toll of a third to a half of the value is stopped. The building by public enterprise or public welfare corporations for rent or for sale at a legitimate price, the enlargement of transportation systems, and the prohibition of places unfit for human habitation are essential to buttress the health standards which are being established. The marvelous experiment from a health standpoint in housing negro families made through the efforts of Mr. J. G. Schnidlapp, in Cincinnati, leaves little doubt about the possibilities of broad social action.

WORKING CONDITIONS

There are several major hazards to the worker's health. Chief among these are dust, poisons, devitalized air, heat, humidity, exposure.

Four million men are working in places subject to serious dust hazard (Hoffman, *Mortality from Consumption in Dusty Trades*,

Bulletin U. S. Bureau of Labor Statistics, No. 231); many poisons menace the health if not the very existence of the employees. Fully half the work places are not properly ventilated. Large numbers of men are subjected to the hazard of excessive heat. An unknown number are subjected to exposure to weather and other conditions inimical to health.

Death rates vary enormously in different occupations and sickness statistics are eloquent in their proof that it is excessively dangerous to work in certain industries. The rate of sickness and death from various causes in different trades proves that work in some occupations increases the chance of death from certain diseases. Men who are predisposed to particular diseases have only a slight chance of escape when engaged in work where the cause of such disease is present. Dr. E. R. Hayhurst states this at some length in his report on occupational diseases in Ohio.

The second most important feature in the relationship between work and disease is the problem of the worker himself. Some workers are very much more susceptible to the health hazards mentioned above than others, so much so that as hygienic as certain industries and processes can possibly be made, still there are certain classes of persons who should not engage in them. This is exemplified today, in many instances as a matter of natural selection; for instance, the more delicate and sickly disposed persons do not follow the more fatiguing or heat-exposing trades. Unfortunately this does not apply so closely to older workers who have been following the more hazardous undertakings for years, and who, having become weakened from various causes, still endeavor to remain at their chosen avocations, irrespective of the damaging effects upon the body. Much of this question of the human factor will be solved in the future by a selection of employes through physical examinations for occupations to which they are best fitted. As an economical principle this must be done for the benefit of employer, employe and society. Having picked the proper physically or mentally capable person for the position at hand, it is further necessary to eradicate health hazards, as far as possible, if we expect to put a check upon unnecessary disease and a check upon the shortened span of life which exists among occupied persons today.

CONSERVING MAN POWER

This is perhaps the most important result of activities relating to health brought about by the war. Here standards can be most readily set up and enforced.

For generations we have been mining our human resources just as we have been mining our mineral resources, in a wasteful fashion. Men went into industry utterly regardless of particular hazards involved or of their ability to withstand them. Accidents destroyed some men and lessened the working power of others. Sickness, partly or entirely an attendant of industry,

took its toll of disabled men. Those who were broken went out to the scrap heap. All the while a new fresh stream came in at the top. The supply of labor seemed to the exploiters sufficient to enable this process to go on indefinitely.

Meager attempts were made some years ago to arrest the more serious consequences. Safety laws were passed eliminating some of the worst hazards of accidents. These laws though indifferently enforced did great good. Then came the conviction that men should be compensated for their losses from accidents in industry. Workmen's compensation laws were passed. Today thirty-eight states have such laws, providing for payment of 50 per cent to 66 $\frac{2}{3}$ per cent of lost wages and some provide for reasonably adequate medical care. In the meantime the burden of loss was shifted largely to industry and caused the initiation of "safety first" campaigns.

These safety efforts have been directed principally to the prevention of accidents. They have taken only incidental account of diseases. Yet disease is responsible for much more disablement than accidents. Many more men go to the scrap heap from disease than from accident. We shall undoubtedly see this fact properly emphasized especially if the burden of sickness is distributed upon employes, employers, and the public by means of social insurance.

The war has emphasized particularly the conservation and rehabilitation of men. We see quite clearly now, that compensation in cash for injuries does not do justice to any of the three factors—the man, the industry, or society. What all three desire is continued working power on the part of every unit. There are three losses sustained by the man who is disabled by sickness or accident;—Wages, cost of medical care, loss of working power.

We have come to see that each of these losses is a loss to industry and to society as well. The immediate problems are those of prevention and salvage. Preventive measures consist in making the work places safe and sanitary; guarding the machines against every possible danger; providing physical examinations to select and properly guide the men in their work; limiting hours of labor to the efficient productive capacity of the men; eliminating poisons, heat, dust and other hazards; and lastly, provid-

ing a plan of medical supervision and first aid facilities to reduce to the vanishing point the danger of infections.

Measures of rehabilitation constitute the restoration, as far as possible, of working power to disabled men. This consists in establishing the physical man, removing his handicaps, and replacing his vocational power by reëducation along some line of work in which he can profitably engage.

We know how to do these things now through the accumulated experience of the warring countries in restoring their soldiers to such measure of physical and vocational fitness as the circumstances of each case permitted. We would be fatuous to an extreme if we do not apply the standards of health and human salvage so firmly fixed.

HAZARDS OF WOMEN'S WORK

Regarding the health of women in industry, much has been said and some definite investigations have been made. The influx of women into occupations to which they were unaccustomed caused great concern lest the hazards of their employment be too great. Scientific inquiries have been undertaken on certain questions about which there has been much conjecture, such as:

1. What are the relative effects of the industrial poisons upon men and women? Some poisons such as lead and mercury have already been shown to be more injurious to women than to men.

2. What is the peculiar effect of bad posture upon women?

3. What are the effects of fatigue upon women not found in the case of men?

4. Do the hazards of heat, dust, humidity, devitalized air, and weather exposure react particularly upon women workers?

Many of these questions have heretofore been considered primarily in relation to the child-bearing functions. However, this point of view must be extended to facilitate the discussion of other factors whose importance arises from individual and industrial effects rather than racial effects; but which relatively are of great importance in dealing with the situation.

CHILD IN INDUSTRY

There is very little difference of opinion today regarding the necessity for the limitation of child labor and for its actual pro-

hibition in certain industries. The next step is now becoming clear. Children must be guided into suitable employments in industry and retained under careful supervision until they are properly adjusted. Morbidity statistics show that sickness is much more prevalent among persons under eighteen in industry than among the employed persons of more advanced ages, thereby indicating the importance of physical strain as a factor in the employment of youthful workers. Vocational guidance is destined to include physical as well as occupational adjustment. Youth entering upon industry should be physically examined and not allowed to enter occupations which will be detrimental to health and physical development. Such supervision ought to extend at least to the eighteenth year.

CONCLUSION

The program for health standards here outlined involves some reorganization and much new organization. Additional burdens are placed upon employers, employes, and the public. Some unsolved problems have been projected into the arena for social action. However, it frankly recognizes the dawn of a new industrial day, when society, acting for all, must deal intelligently and comprehensively with the human problem. That problem in the main consists of reducing the hazards of life to a minimum, increasing the productive capacity of the individual, restoring men to working power and stabilizing society itself.

Training Labor: A Necessary Reconstruction Policy

By C. T. CLAYTON

THE prime object of reconstruction must be the maintenance of the present relative wage scales, now perhaps the highest American workmen have ever known. Unless the reconstruction policy makes a deliberate point of sustaining such scales and adopts sound methods for their support, there will inevitably be a sag in the wage scales in advance of any diminution in the market price of commodities—and consequently a narrowing of the margin between accustomed living costs and the income of the wage-earner. This margin, even in the face of recent general reductions resulting from the elimination of overtime and Sunday work, is better than wage-earners usually have enjoyed. If this margin, which gives to wage-earners some opportunity for saving for comforts, and for physical and mental self-improvement, is a just share of the value their labor has created, equity demands its retention. Even if it be contended that this margin, which recent abnormal conditions have established, is an abnormal result not entitled to protection, abundant considerations of policy and expedience suggest its continuance.

But if that margin, which is the ratio of the wage-earner's income to his living costs, is abnormal, it cannot be sustained by mere resolutions no matter how clearly general public considerations support those resolutions. Economic pressure of competition will soon nibble it off unless some other equally powerful economic force can be mobilized in its favor. There is only one such force: the relative production of the individual worker. To sustain present relative wage scales and to meet international competition, then, we must increase our per capita production of commodities sufficiently to offset competitive pressure.

POST-WAR LABOR PLACEMENT ON THE BASIS OF ACQUIRED SKILL

Wherever possible, workers who are released from war employments should be directed to peace-time occupations in which the skill acquired in the course of their war work may be effectively

utilized. This seems almost too obvious to mention, but its application is not simple. Peace-time manufacturing establishments dot the whole land. Seventy-five per cent of all war contracts are said to have been awarded within four states. War contractors drew their labor forces from all directions, and neither the worker, when released, nor the peace-time employer seeking workers, will be able to establish connection unless each can learn of the supply and demand for labor of various kinds.

Industries apparently quite dissimilar employ much labor of like or similar occupation. The building of ships requires more than a hundred different kinds of skilled labor; but over 60 per cent of these are found in other industries also, and many are common to several industries. Among the remaining 40 per cent of occupations peculiar to shipbuilding are found many quite similar to those used in other industries. Carpenters, cabinet-makers, joiners, or pattern-makers can all readily take up airplane repair and replacement work as their occupations are sufficiently similar. A long list of metal-working occupations includes specialists on similar machines drilled upon processes which with comparatively little added training are almost interchangeable industrially. The utilization of occupational similarities, by an analysis of the industries, offers a very practical means of facilitating the readjustment of labor due to the cessation of war manufacturing and the revival of peace-time industries. This utilization is comparatively simple. The government has the machinery at hand ready to be set in motion. All that is necessary is to inform employers how to use existing facilities. The Department of Labor has two bureaus, each possessing some knowledge adapted to the need. Through the local community board system and its clearing reports, the employment service can find and transfer labor as it is released. It can also ascertain and report the occupations of the people that are being released. The training service of the Department of Labor maintains a staff of experts in offices scattered throughout the industrial territory who are able to suggest to manufacturers the kinds of labor among those being released which, with the least training, will be found adapted to their special needs. Virtually, these experts are able at command to write a labor-supply prescription which the manufacturer may

present to the employment service to be filled. By this combination, using expert information possessed by the training service and the very ample facilities of the U. S. Employment Service, with the least waste of time and expense, all the available skill and experience of released labor can be saved.

For several months the Bureau of Labor Statistics in the Department of Labor, acting at the request of the employment service, has been preparing a classification of occupations—to provide a ground of common understanding between those seeking employes, and workers seeking employment—which is based upon the duties required in the several occupations. This work is now well advanced and numbers of industries have been quite well analyzed into their various occupations.

As a result of the experience of the Adjutant General's Office of the War Department in developing an analysis of trades and occupations, and basing upon that analysis a series of trade tests which were very effectively used to ascertain the extent of trade experience possessed by men drafted into the army, a series of trade test handbooks covering various industries is projected by the employment service. So far as this work has gone, the results are available to aid manufacturers and workers seeking a knowledge of the needs of employer and the qualifications of employes. Both the occupational classification and the trade tests are vastly more valuable in the hands of experts; it is therefore suggested that manufacturers may well utilize the training experts as advisors regarding the prescription which they should present to the employment service.

TRAINING IN RELATION TO LABOR EFFICIENCY

Every manufacturer possessing a vestibule training school has a most complete instrument for laboratory examination and analysis of the qualifications of newly employed workers. For such testing, nothing better than a vestibule school could be devised where the point to be determined is, "What is the mental tendency and to what extent do the qualifications of this new aspirant for employment go?" Of course, not all applicants may be tested in this way as the facilities of the school, like the facilities of any laboratory, are limited.

A prime cause of labor turnover—one of the greatest menaces

to the maintenance of wage levels, both absolute and relative—is in the failure of our manufacturers to secure a full measure of productive efficiency. A recent analysis of the causes of discharge in a large establishment showed that but 10 per cent were disposed of on grounds of slacking; the other 90 per cent were discharged for reasons in most cases due primarily to failures in management. A similar analysis of the reasons for quitting given by men leaving employment, checked against conditions in the plant, disposed of 90 per cent of the quittances as likewise due to failures in management.

Six reasons may be assigned for inefficiency in production, namely, (1) power failures, (2) equipment and repair failures and limitations, (3) lack of instructions, (4) lack of training, (5) failure to supply material, (6) personal slacking. A chart recently prepared, analyzing the individual output of twenty-six men employed in one factory department, showed that in two weeks the average output of the men ran under 35 per cent of what they should have readily produced. The majority of the men turned out pretty nearly the same amount every day; and their output usually ranged in the neighborhood of three hours' value for nine hours' work. Inquiry into this very low efficiency established (1) that this was as good a department as the factory could show, (2) that the factory had a reputation for efficiency, and (3) that substantially every one of the six reasons given entered into the low result, but the sixth reason was almost a negligible consideration. The real difficulties lay in failure to supply material when and as needed, in bad organization of equipment, in recurrent failures of power and chiefly in lack of training. It is reported that a large arsenal found itself able to employ its machinery during working hours but 55 per cent of the running time, on the average. Many private establishments would not show up so well as that.

It would seem that the advocates of higher efficiency should turn their attention away from attempts to speed up those workers who already are producing reasonably well and consider the idle machines and the idle men. If the average workman, whose output is about one-third of what it could be, is given better equipment, material when he is ready for it, instructions as to what should be done with that material, and training so that he

can execute what he is told to do, that average man will not need to be pushed at all. Neither bonuses nor other incentives are really an essential to the case. The pride of the average man in his craftsmanship and his willingness and ambition to do his share is all the incentive that is necessary. It is not unreasonable to assert that attention to these elements of production could double the individual output of the American workman.

Nor does this express all of the advantages such an analysis might suggest. All industrial workers are entitled to training. Both the employer and the worker need it—the employer because failure to have training is one of the causes of inefficiency. If the employer is to sell in the market, meeting competition both at home and abroad, he must have a larger output and a higher efficiency. He cannot get this unless his people are trained “to the nails.” On the other hand the employe is entitled to and wants to have the best possible training. Such training should have a broad outlook—not be narrowed to mere repetition of monotonous and socially inefficacious movements. Both employer and worker are entitled to assistance from the government in obtaining this training,—a matter requiring access to sources of information and the gathering of educational material in a manner and to an extent beyond the reasonable powers of private organizations.

INDUSTRIAL EDUCATION A NATIONAL NEED

Training is nearly allied to industrial education but does not quite compass its breadth. The Federal Board for Vocational Education is responsible for assisting industrial education of the vocational type. Its method of operation is through the reimbursement of state boards of education for one-half the sums they expend for the salaries of teachers in vocational schools. The board has no direct connection with manufacturers or with vestibule schools as such. It can reach the vestibule school only when the State Board of Education takes over that school as part of the public school system.

The Department of Labor's training service is concerned with industrial training as carried out by manufacturers at their own expense, for the purpose of making their labor efficient. It advises the manufacturers; it prepares for them plans for training;

it assists them in the carrying out of those plans. In a way, the work of the Department of Labor is a kindergarten service for the higher industrial education being promoted by the Federal Board for Vocational Education. It promotes organization of vestibule departments in industrial establishments, the ultimate development of which may be and very frequently will be a better appreciation of the benefits of comprehensive industrial education. In the thirty-eight states where there are compensation laws, training is of special importance because it has been found that a great majority of injuries to working people are caused by ignorance. Most accidents happen within the first few hours of employment, and these accidents may be greatly reduced by previous training. Both quality and quantity of output is greatly increased in plants where the employes are regularly trained, because during the course of training accuracy is instilled.

The training room of a large airplane factory a few days ago was called upon to aid one of the factory departments which had fallen into difficulties over the reduction of an essential part for an important government order. This training room has a number of machines which could be used for the manufacture of the part. Without in any way increasing the speed of their operations the learners working on the particular machines were put on that special part. They turned it out with practically no spoilage—a much better ratio both of speed and accuracy than the factory department could show—and saved the day for the delivery. Yet the work was merely made a part of the training room's instruction. It is the experience of all manufacturers who have such training that their turnover is greatly reduced. Those who cannot make good in the factory are found out in the training. Those who can make good are conditioned to the need and go into the factory understanding the rules and discipline, ready to produce satisfactory manufactured material. It is a common occurrence to obtain a statement from a factory having training that their turnover has been reduced one-half since the training room was introduced.

Well-trained labor is more truly versatile because it has a broader vision of its opportunity and a better understanding of its duties. It is more secure in its employment inasmuch as proper training gives labor an understanding of all the possibili-

ties of the machine upon which employed, and workmen thus equipped are certainly much more profitable to an employer because so much more adaptable. If wage levels are to be maintained, high living costs lowered, and foreign markets met and dominated, it can only be by improving the national average output. One of the most essential elements in that improvement must be a deliberate building up of sound industrial training.

The Employment Manager and Applied Vocational Guidance

By IDA MAY WILSON

EMPLOYMENT management has so recently been given professional standing that we have been concerned more with forms and methods than with the manager and his training. Industry's amazing growth has demanded the immediate and material. Shall we now pause to consider the less immediate and immaterial?

It is our belief that the cornerstone of greatest success in understanding people is a broad and liberal education. Lives there an employment manager who has studied, read and experienced sufficiently to be perfectly qualified to interview all classes of help, all individuals? To follow their progress and make adjustments when necessary until every person in the plant has the best job he is able to fill in the interests of himself and of the firm? We reflect with a degree of complacency that education, reading and experience are relative terms, the desirable quantity forever the elusive *N*.

He has not a liberal education who has not learned to know people, what they think, what they do, their limitations, their possibilities. Sociology, psychology and labor economics the schools teach, but after the principles of these studies have been inculcated, it remains for the student to go to living sources for vocational information if he would stem the tide of aimless drifters. He must learn how the world's work is done in the office, the factory, the field. An increasing fund of knowledge may be gleaned from the vocational texts and current periodicals, but as vocational guidance is only less new than employment management, the chief source of information is the occupations themselves. Each should be studied from two standpoints. The nature of the occupations should be analyzed in order to make specifications; their requirements in workers in way of training, experience and personal qualities come next. New vocations multiply like the loaves and the fishes; old vocations change over night. New values are given working conditions in

these days when the elimination of shadows is considered a serious economic problem. The vocational director can never reach a calm where he may rest his oars, satisfied that he knows all that he should know. The undercurrent of progress will drag him to an unknown sea unless he pulls steadily towards the receding goal of better service.

Real employment management is vocational guidance. It develops the source of labor supply, makes right selections of workers, places them properly, does intelligent follow-up work, transfers and adjusts and promotes until every employe in the plant has the best possible job. And it is more than this. It is social engineering, not only for those selected for the plant, but for all the applicants that for any reason cannot be taken into the organization. To succeed in a large way the employment manager must deal not only with the labor requisitions of the day, but with those of all the days to come. With a keen eye on development of sources of labor supply, he will weigh the possibilities of each rejected candidate for employment, and give that candidate a vision of himself as a trained, efficient worker in an occupation for which he seems fitted. With those who have not passed the formative years the possibilities are numerous, and the vista shown must be wide and long. But with the majority of rejected applicants the formative years have passed, and circumstance has to a large extent shaped the life.

It is pitiful to review the number of applicants who ask vaguely for work of any kind. Many of these are intelligent men and women with latent possibilities. A few months ago a neat young matron of this class came into our office. She had a grammar school education and the common experience of the untrained. She had been a clerk in a retail store, she had served tables in a restaurant, she had mangled in a laundry. Inquiry drew out the fact that she had liked her arithmetic best of her school studies. On our request she did readily a problem in fractions and another in decimals. We advised her to take a course in operating a bookkeeping machine. Our plant was at that time combing the country for a number of such operators, as commercial high school and business schools generally are not even yet alive to the need for these operators. We succeeded in getting the required number only after days of searching and vexing delays. We

explained to the applicant the opportunities in this field, the salaries paid, the nature of the work, and we discussed its probable future. As she had a child to provide for, we secured her a part-time position in a city in which such a course was offered by a bookkeeping machine company. With little time and effort on our part, the young woman is now in the class of trained workers, earning an excellent salary. This is but one of many cases in which we have been able to persuade applicants who have drifted from one small job to another, to prepare themselves for a real job. Lack of ambition in this direction is rare. Thought has not been directed towards definite training for a line of work within their possibilities of success, and they have not known where to go to learn about the preparation for any vocation. Their friends are like themselves—drifters until by chance caught up by one interested in making human material into the best product for which it was designed.

If the employment manager gives vocational advice and information painstakingly to rejected applicants, he will presently have built up in the community of the plant an excellent source of labor supply, and he will have increased the good will of the plant. Employes living at home are a small factor in labor turnover. They have community interests and family ties to anchor them to service. Organized industry profits directly by applied vocational guidance. And the employment manager should be able to act as vocational guide.

In these days of rapid production, laths, power conveyors that handle the product from raw material to the waiting freight cars, and full automatics even in our counting, calling and filing systems,—all such classes of labor must be better trained. Industry demands constructive service from its workers, most of all from those who have any part in moulding men's destinies.

Labor can never go back. The scarcity of labor has brought out inventions to do every kind of work that does not require brain. And as we stood a few months ago in one of the country's greatest war industries, and watched long rows of huge automatics use tool after tool with precision and toss the finished product out at regular intervals, it seemed that a substitute had been found for brain. But while we looked there came a jarring note in the loud purring of the machines. Then it was that a man appeared. Quietly and effectively he plied his trade,

and the monster purred once more. Even the full automatic must have the tool setter in the background. The handy man is passing, the trained man is rising to a higher plane of skill.

Experience has been for many employers the sole criterion by which a man was judged. Executives now know that a man may have done a thing badly for ten years. We ask a man what he can do, and to show us how he does it. There was a time when employers delayed decisions until they looked up references. Was there ever a man who could not get recommendation from someone in a position of authority? We recall an experience in a machine concern. A rival company sent a form reference to be filled out. The plant official to whom it was sent remarked, "Well, Brown was no good here, but I won't keep him from working for the M—— Company." Men seem to feel that it is a breach of the unwritten code to say anything against a man who has given their names as references. When the sudden and unprecedented need for workers sprang from the World War, references went into the discard with other slow processes. Statements of experience went with them. Skilled workers instead of merely experienced workers were sought by production men.

Vocational training received the thought of the chiefs of industry. Our government established intensive training courses. Organized industries throughout the country opened vestibule schools. A few colleges and secondary schools tardily followed. Today a man in a government plant is paid a good wage while learning to do almost any part of its work. One great industry trains foremen for their job as teachers. Another transforms skilled mechanics into teachers of newly inducted workers through the medium of schools. A school has recently opened to teach firemen their job. It is the era of training for every vocation. Efficiency experts figure that there is a scientific time study for even variable operations. Operations are divided into tasks; each task is studied until motions are reduced to the minimum. Training is everywhere the essential thing. It behooves the vocational director to keep abreast of the vocational demands and the places where training may be secured to meet them. The employment manager who has this knowledge applies it to the plant workers who seek promotions, the new employees who aim to develop into experts, and the rejected applicants who are potential employees.

The Resolutions of the War Emergency Congress of the United States Chamber of Commerce¹

Cancelling War Contracts. It is in the public interest that all war orders placed by any contracting agency of the government and accepted in good faith, whether formally and regularly executed or not, should, upon cancellation by such contracting agency, be promptly and equitably adjusted and satisfied as if every formality had been observed, and when so adjusted the amount ascertained to be due by the government should be promptly paid to the end that these funds may be utilized by the industries of the country to speed their transition from a war to a peace basis.

If it should be ascertained that legislation is necessary or desirable to accomplish this end, Congress should forthwith enact such legislation.

Officials dealing with questions of adjustment on account of war orders must necessarily be familiar with all the conditions affecting the order. It will greatly promote expedition and the interests of both the government and private enterprise for the officials who made the contracts to remain in the government service to participate in the readjustments.

Surplus Supplies. Under date of November 29, 1918, the Secretary of War issued a public statement, *i.e.*, "To prevent too violent dislocation of industry from the standpoint of both employe and employer, accumulation by the war department of either raw material or finished product will be distributed when and where liquidation of such supplies will least interfere with the return of industry to normal condition." Such action would seem to insure the stability of the industries affected which fully appreciate this liberal position.

Therefore the war service committee of American industries

¹ The following resolutions bear only in part on the problem of a reconstruction labor policy. Labor questions, however, are so closely interrelated with other problems of reconstruction that the editor has judged the following pronouncement of organized business (last general session of the War Emergency Congress of the United States Chamber of Commerce at Atlantic City, December 4-6, 1918) to have sufficient interest and importance to warrant its inclusion in a volume given over exclusively to the subject of labor.

hereby tender to the war department their services for their respective industries for the purpose of advising with and assisting the war department in the disposition of such materials.

Removal of Restrictions. It is in the public interest that all war regulations of industry should be revoked and all war restrictions on industry should be removed as speedily as practicable, save such industries as are engaged in the production, preparation or distribution of foods, feeds, and fuel and such last named group of industries should be freed from war regulations and restrictions as early as consistent with the welfare of this nation and of the Allies.

Pivotal Industries. Conditions brought upon us by the European war at its beginning, as well as our national necessities after we entered the war, made it of the highest importance that a number of industries should at once be developed in the United States. Large investments, both of capital and skill have since been placed in these enterprises. Upon the production of some of them, relatively small in themselves, the continuation of some of our largest industries has depended. Some of the recently developed industries have national importance in fields much broader than the markets of their products; for they may serve for example, to promote scientific research, which will add to national efficiency, resources, and wealth in many distinct ways.

It becomes essential, therefore, that the government should at once proceed to ascertain the industries which have been developed during the European war and ascertain those, the maintenance of which are indispensable for the safety of our industrial structure and our military establishment.

When these pivotal industries have been ascertained, means suitable in view of their nature, and situations should at once be provided for their encouragement and preservation.

Industrial Coöperation. The war has demonstrated that through industrial coöperation great economies may be achieved, waste eliminated and efficiency increased. The nation should not forget, but rather should capitalize these lessons by adapting effective war practices to peace conditions through permitting reasonable coöperation between units of industry under appropriate federal supervision.

It is in the public interest that reasonable trade agreements

should be entered into, but the failure of the government to either clearly define the dividing line between those agreements which are, and those which are not, in unreasonable restraint of commerce, or to provide an agency to speak for it on application of those proposing to enter into such agreement in effect restricts both industry, and the general public of its benefits. The conditions incident to the period of readjustment renders it imperative that all obstacles to reasonable coöperation be immediately removed through appropriate legislation.

Federal Trade Commission. The Federal Trade Commission was advocated by the President, and was created, as an agency to make the administrations of our trust legislation explicit and intelligible, and to provide "the advice, the definite guidance and information" which business enterprises require. The normal importance of the commission's task is now tremendously increased by the imperative need for whole-hearted and sympathetic coöperation between the government and industry especially during the readjustment period and suggests the desirability of the two existing vacancies in the commission's membership being promptly filled with able men of broad business experience and clear vision prepared to assist actively in discharging these tasks along constructive lines.

Industrial Relation. The convention heartily endorses in letter and spirit the principles of the industrial creed so clearly and forcibly stated in the paper read to it Thursday morning by Mr. John D. Rockefeller, Jr., and urges upon all units of industry where they may not be employed—the application of such principles.

Relocation of Labor. The conversion of the industry of the country from a peace basis to a war basis involved a general and important dislocation of labor. This movement was gradual. The end of the war involves a much more rapid change in industry; while there will be a great demand for labor to meet the foreign and domestic requirements there may be for a time in special places a temporary condition of unemployment.

In the new relations of industry to labor we conceive it to be incumbent upon the community affected promptly to meet such conditions.

Public Works. The development of public works of every

sort, as recommended by the president, should promptly be resumed, in order that opportunities of employment may be created for unskilled labor.

Taxation. The cessation of hostilities brings to business interests a feeling of deep concern in the matter of taxation. The problems of readjustment are made more difficult through inequalities in the present law.

We believe, therefore, that in the consideration of amendments to the present act, or the passage of new revenue legislation to the views expressed by organizations of commerce and industry. Ability to pay, inventory values and proper reserves together with careful survey of the amount of revenue required under the new conditions are matters of vital importance to business interests of the nation during this readjustment period.

Inventories. We urge that Congress should give careful consideration to the grave menace now facing all industry due to the fact that both raw materials and finished goods are carried in full measure to meet the extraordinary requirements of the government and of the people, and that in large part the stocks have been acquired at abnormal cost and are therefore carried into inventories at inflated values, thereby showing apparent profits which have not been realized, and which probably will never be fully realized. These are largely bookkeeping or "paper" profits, and should not be used as a basis for taxation.

We therefore recommend that any tax law shall provide that during present conditions the taxpayer shall be allowed to make a deduction from his apparent profit by way of a reserve for a subsequent shrinkage in the value of merchandise.

We believe that the interests of the government can be protected against abuse of this privilege by the fixing of a maximum percentage of deduction to be allowed, and by the use of proper methods of inspection and appraisal.

Railroads. The Congress of the United States should speedily enact legislation providing for the early return under federal charters to their owners of all railroads now being operated by this government under federal regulations permitting the elimination of wasteful competition, the pooling of equipment, combinations or consolidations through ownership or otherwise in the operation of terminals, and such other practices as will tend to economies without destroying competition in service.

Means of Communication. We are opposed to government ownership and operation of telegraphs, telephones and cables.

Merchant Marine. We recommend that the construction of a great merchant marine be continued and amplified, and that its operation under American control be kept safe by such legislation as may be necessary to insure its stability and its lasting value to American industries.

Port Facilities. The recommendations of the Port and Harbor Facilities Commission of the United States Shipping Board for development ports are supported. Vessels of foreign register needed for our commerce by sea are attracted to those ports which are best fitted to coal, to load and to unload cargoes, and thus provide means for a quick turn-around.

After ascertaining the port facilities of European countries, and their plans for further development, the commission has recommended that there should be a local port commission at each of the important ports upon our coasts, that upon these commissions there should be representatives of industrial, commercial and railroad interests centering at the port, that facilities should be installed to meet the needs of the port, and that a zone system should be arranged by which exports and imports would flow through those ports which are within economic transportation distance of the points of origin and destination.

There should be coöperation with the Facilities Commission in its task of expanding means which will enhance the position of the United States among maritime nations.

Public Utilities. Public utilities have faced difficult problems, which have been accentuated by conditions arising out of war. The development and efficiency of such a utility as local transportation has immediate importance for every community.

It is recommended that the Chamber of Commerce of the United States should appoint a committee to investigate and study the question of local transportation as it relates to the control of rates and service, franchises, taxes, the attraction of capital into the business, and such other questions the committee may find pertinent. Such a committee should report its recommendations to the board of directors of the National Chamber, and the board should deal with them in accordance with the established procedure of the chamber.

Water Powers. Industrial activity is dependent upon the available supply of power. A bill which would affect the development of hydro-electric power upon waterways and lands which are subject to federal jurisdiction is now before a committee of conference between the two houses of Congress. It is important in the public interest that federal legislation on this subject should be enacted without further delay. We accordingly urge that the conference committee arrive at an acceptable form of legislation in season for enactment at this session of Congress.

International Reconstruction. In war we have made common cause with the Allies. We should likewise make common cause with them in seeking the solution of the immediate problems of reconstruction which they face, because of the efforts they put forth in the war. These problems peculiarly depend for their solution upon commerce.

Raw materials and industrial equipment which we possess the Allies urgently require, that they may reconstitute their economic life. We should deal generously with them in sharing these resources.

In order that we may share our materials with the Allies, we must also provide them with credits through which they may make the necessary payments.

Our ocean tonnage must supply our troops overseas and help to provision the inhabitants of war-devastated regions. The part of our ocean tonnage not required for these paramount needs, and vessels of associated countries which are in a similar situation, should be entered into the common service of all nations. This common service should secure to all nations their immediate needs of food, raw materials, and transport for their products.

European Commission. The business men of the United States, having devoted their energies and resources toward the winning of the war, regardless of sacrifices or burdens, in support of the principles for which this country fought, appreciate the necessity of continuance of unremitting effort in order that the world may be restored to normal conditions as quickly as possible and the blessings of peace brought to all peoples.

In the accomplishment of these results the highest efficiency of the great commercial and industrial powers of our own country

and that of the Allied nations will be developed only through coöperative effort and common counsel.

In order, therefore, to contribute to the fullest toward the prompt solution of the problem presented, the Chamber of Commerce of the United States is requested to enlist the coöperation of national bodies devoted to the extension and promotion of American commerce and particularly foreign trade, in the appointment of a commission representative of American business, which shall proceed without delay to Europe and establish machinery for the following purposes:

A. To study at first hand the reconstruction needs of European countries in conjunction with business men of these nations in order to advise the business men of the United States as to how they may be most helpful in meeting the necessities of Europe and caring for the interests of American industry and commerce.

B. To be available to the peace delegates of the United States for any needed information which they may be able to present or for any other aid which may be given by the business men of the United States through the medium of such a commission.

The Chamber of Commerce of the United States also is requested to appoint members of the commission to represent the business men of the United States at the forthcoming meeting of the International Congress of Chambers of Commerce.

European Committee. Many other suggestions were received and considered. All of them will be transmitted to the Chamber of Commerce of the United States for its information.

Foreign Trade Markets. We strongly urge upon our government the vital necessity of encouraging and developing our foreign trade through all appropriate means possible, in order that the production of industry may afford employment to wage-earners and prosperity to the nation.

South American Relations. It has long been the policy of this nation to cultivate relations of close sympathy with the nations of the Western hemisphere as expressed in the Monroe Doctrine. We believe that these relations should be supplemented and strengthened by a vigorous development of our commercial and financial associations with our neighbors of North and South America.

The government's control of shipping should be brought to

the accomplishment of this purpose as soon as it is consistent with other urgent needs, and the work of the Pan-American Union should be continued and broadened in scope.

Property Rights in Mexico. By provisions in a constitution adopted while much of the country was engaged in civil strife, and through subsequent legislation, Mexican authorities have threatened rights acquired by Americans in good faith, especially in minerals, including petroleum. Against threatened confiscation the American government made formal protests. The attitude taken by the American government is heartily commended as in accordance with obvious justice.

Education for Foreign Trade. In the larger opportunities which are to be opened to American business men to play a part in the international commerce of the world the need will be felt for more men who are trained to a knowledge and understanding of the language, the business methods and the habits of thought of foreign lands. Complete success can only come to those who succeed in putting themselves into full accord and sympathy with the peoples with whom they are to deal.

We urge upon our industrials that they take steps to provide opportunities to young men to obtain an education in the practices of overseas commerce and finance and in the practical use of foreign languages.

We call the attention of the various departments of government and to educators to the importance of this matter and ask that special efforts be made to supplement the valuable work already done and to open up every facility to the furtherance of a successful prosecution of this educational work.

Forest Products. The Forest Products Laboratories, of the United States Forest Service, have rendered valuable service through scientific investigation of the physical properties of American woods and their adaptability for structural, industrial and ornamental usage. It is of great importance to American industry that the government should extend and adequately maintain the work of the forest products laboratories.

Cost Accounting. It is the sense of this convention that uniform cost accounting should be adopted by industries.

National Trade Association. The experiences of the war have clearly demonstrated the value of national trade organizations and their service to the country as well as to industry.

This conference heartily approves the plan of organizing each industry in the country in a representative national trade association and expresses the belief that every manufacturer, jobber and producer of raw materials should be a member of the national organization in his trade and cordially support it in its work.

Capital and Labor¹

By CHARLES M. SCHWAB

THERE is a question of great and timely importance, to cover which no one can lay down general rules, and that is this great and important labor question. I am one of the men who believe in the fairness of American labor. I am one of the men who believe that the only foundation upon which any of these things can permanently rest is the economic use of everything, whether it be labor, material, manufacture or what not. Any foundation of organized labor or capital that is on a false basis must fail. We started in some twenty years ago on a series of exploitations that many people called trusts and there were many such concerns organized that had as their prime motive the artificial idea of either restricting production or increasing the selling price. You have seen them, one after the other, fail and fade away. That was on a wrong basis. Our Congress, our legislature in Washington, realized it, and rightly and justly took steps to correct it. What has been true of capital will be equally true of labor, and therefore the education of the American laboring man must be to have him realize that his permanency and success, and the success of the nation, will depend upon labor conditions and capital conditions that are founded on economic principles first of all. I have had my hand in this matter of the organization of capital. I know something about it; I know what I am talking about.

The other night at Bethlehem I told a story about a dream I had had. Now that I look back over those days and the participation I had in them, I shudder a good deal. When the investigations of capital and the organization of great companies were taking place, I commenced to feel a good deal disturbed, and with all the agitation in the press commenced to feel that perhaps I had participated in something that was sinful and dishonest, and all sorts of things. I am a good Catholic. Now there is Father Zahm, the great Catholic priest, who went with Theodore

¹ Reprinted from address delivered before the War Emergency Congress of the United States Chamber of Commerce, Atlantic City, December 4-6, 1918.

Roosevelt up the river of doubt, but who has never left any doubt in my mind as to where he stands. I decided that, being a good Catholic, I would go to confession, and I shrived my soul of all these doings. Father Zahm was in the confessional, Mr. Morgan was on one side of the confessional and I was on the other. Suddenly the Father disappeared and I said to Mr. Morgan "Where has the Father gone?" "Oh," he said, "he has just gone out in the church a moment." I said, "Don't you believe it! He has gone for a cop."

We shrived ourselves of these misdoings. We had learned our faults. We have learned where we were wrong. Up in Washington they stopped us—they did stop us—they do not do it now. They had to get us together to help things out a little. They found in Washington that it was a good thing to have people act in unity when many of these big problems had to be discussed and solved. They found it was a good thing to have the products of this country distributed from a common center for economy's sake and for the good of the nation, and that the mistakes were not all the fault of capital. Much good came from it, but like most of these things they went too far and they had to be corrected.

I am not opposed to organized labor. I believe that labor should organize in individual plants or amongst themselves for the better negotiation of labor and the protection of their own rights; but the organization and control of labor in individual plants and manufacturies, to my mind, ought to be made representative of the people in those plants who know the conditions; that they ought not to be controlled by somebody from Kamchatka who knows nothing about what their conditions are.

But, in the years gone by, I seriously doubt many times if labor has received its fair share of the prosperity of this great country. We, as manufacturers, have got to open our eyes to a wider vision of the present and the future with reference to our workmen. We have got to devise ways and means by which capitol and labor, that have so often been termed synonymous, shall share equally, not in theory, but in practice. We have got to devise ways and means of education. We must not only talk about these things but we must do these things. We have got to realize that many unjust demands will be made by labor as

they probably have been made by capitalists and employers in the past. That is one of the lessons this great war has taught us—true democracy. The thing we have to do is to teach, not patronize, to educate and have the American laborer know and feel that he can stand with his head in the air as you can and as I can, and say with pride, "I am an American citizen." What does American citizenship mean except that any man to be a true American citizen must be able to hold up his head and feel within his heart that he has done his duty to his nation and to his fellow men. What prouder thing is it for any man to say than, "I am an American citizen." What greater nation is there on the face of the earth, what nation that God has endowed with more natural resources than this great nation of ours? Above all He has endowed it with a people so filled with energy and patriotic enthusiasm and integrity as to place the American nation for all time to come at the head of all nations of the world.

My work in Philadelphia and in Washington in connection with the fleet has been exceedingly interesting. It is exceedingly interesting now. It is very important now. I telegraphed, however, a few days ago to the President of the United States that, important as this work at Washington was, I felt that having 170,000 employes of my own and a payroll of twenty-five million dollars a month I could be of greater service to this nation and this country by retiring from the work I had in Philadelphia to the study of important questions that would arise in connection with this transition period in the various industries of the United States, and I begged to be relieved from one important duty to take up what I believed to be a more important duty.

That is what I feel is our duty, as manufacturers now, if we want to preserve the situation in America. We have to study it with utmost care. Each manufacturer must study his own case and his own situation from his own standpoint and must know his own conditions. There can be no general rule that will be applicable to all. We ought to urge a continuance of work in every direction. Matters will adjust themselves industrially in this country sooner or later by the natural course of events, but what we want to prevent is that sudden slip of the cog which will give us a social jolt that may be dangerous to our industries for years

to come. We must be patient. We must go along with small or no profits if necessary. We must bend every effort to keep our employes busy, employed and satisfied. They must be made to realize the situation as we see it and be content to help us in that development. We must get closer together with our work people. We must listen with patience to their side of the story, and we must induce them to listen with patience to our side of the story. The day of autocracy in government and labor has gone by. It is the day of democracy in which we now stand shoulder to shoulder for the protection of our mutual interests and above all for the protection and glorification of this great and glorious country of ours.

The message which I have given you is a general one, but if I can get into your hearts and minds the spirit that I have in my own, which I have learned from the lessons of this war, as most of you have learned them equally with me, I shall feel that I have accomplished much. I would emphasize the fact that we must face a new condition of affairs, that we must work out the problems connected with it, that we must expect troublous times and difficulties in the working out of these problems but above all we must plunge ahead with the confident belief that the business, industrial and manufacturing interests of the United States are going onward and upward in spite of any condition that may arise in this great country.

I am an optimist. I am not a pessimist. During my career in business life, during periods of greatest depression, I have never lost confidence in the United States or its manufacturing and industrial position. I remember very well in 1887, when as engineer of the Carnegie Company I was building a rail mill, full of youthful enthusiasm I wrote Mr. Carnegie that this mill would produce a thousand tons of rails a day. He wrote back and said "Young man, I have agreed to the foolish expenditure of the money for that great mill. I will exact only one condition, and that is that you never tell any one that we are foolish enough to believe that this country will ever require a thousand tons of rails a day." 1887 is not so very long ago, and yet this country can very well consume now from 20,000 to 25,000 tons of rails per day.

So it has been true in every branch of industry with which I

have been connected. It has gone on by leaps and bounds. Periods of retraction and recession and depression have come, but the grand curve and the general trend, is always upward and onward. So that those of you who have industrial establishments, and capital invested in the same, may take from me the note of optimism that I have. My only thought and wish is that I had a good deal more to look forward to in the future, not because of the money that it is going to give me—for I do not know whether I have any money these days or not after I have paid my taxes; I am afraid to look. I borrow all the money I can. I was a great buyer of liberty bonds but I have not been able to pay for one of them. I tried to borrow some money from Stotesbury of Philadelphia. I went around to his place and said "I must see how much I can get from you." He said, "You're an old friend and an old customer; you can get all you want from us; we will give you half a million dollars." I said, "No, I have to have a lot more than that. There is Mr. Baker in New York; he promised me more than that, and he don't know me." Mr. Stotesbury replied, "That is the reason he is willing to give it to you."

I read in the paper yesterday morning about a bank president who got nervous seeing me come into his bank because he knew I would borrow all the money I could get from him and that I would put it into smoke stacks and chimneys and boilers and rolling mills, etc. I thought to myself, "That is a pretty harsh criticism." I sincerely felt that when the achievements of my life had been completed and my obituary is being written if I can leave as a monument a long line of smoke stacks and boiler works and rolling mills and industrial establishments, I shall be prouder than of the grandest monument men might erect in my memory.

One morning a superintendent in one of the shipyards on the Pacific Coast discharged a workman. He said, "Mike, we don't want you any more; you are no good." Mike went home, but the next morning he was at work on the same job in the same place and everything seemed just as usual. The superintendent came out and saw him and said, "Why, I thought I discharged you yesterday." Mike said, "You did, but don't you do it again, because my wife gave me hell for it."

We Americans may be great manufacturers and all that, but we have always paid the same tribute of respect to our wives that this great nation has paid to the women of the United States in this great crisis. Why should we not do that? I do not mind being scolded by my wife, for I know she is usually right. Why should we not expect this of American mothers and American wives, the true women of a true nation, the true wife of a true American and the true mother of a true American son?

When this great war is over and peace is signed, and we are back once more to the everyday conditions of life, it is not going to be the men who built the airplanes or the men who built boilers or the men who built engines whose names will go down in the golden pages of history, but it will be the names of the boys in the trenches of Flanders who have offered the supreme sacrifice of their lives for our nation—it will be their names which will ever be remembered on the pages of the history of this great country of ours. While it has been a pleasure to build ships to transport and feed these boys while they have been over there, the pleasure is an hundredfold keener to build ships that will bring home the boys who have brought to us the great victory and standing of this great country of ours.

The two points I want to emphasize are that we must all give our best thought, our best recommendations and our best endeavors. The men in business in the United States are not the men who are working for money alone. The chief pride of American character is successful accomplishment. It may be measured by the dollars that go into his coffer, but the real throb and thrill of pleasure that comes to his mind is one of successful accomplishment. Let us fill our minds and hearts with determination that we American manufacturers and American business men are going to have successful accomplishments, that we are going to have them in an honorable way and that we ask our great representatives in Washington, from the President and the Secretary of Commerce down, to help American business men help sustain the prestige of the American nation and that we pledge ourselves to treat fairly with that great army of workmen who must share with us the prosperity and happiness of this great country of ours.

Post-War Standards for Industrial Relations¹

By HENRY P. KENDALL

NO serious minded men today feel that we shall return to the *status quo ante*. Prior to the war the problem of industrial relations was the greatest problem, with which the American people had to deal. The need of immense production after the beginning of the war caused a violent readjustment of the machinery of production. With it came an equally complete change in the matters of working conditions. The withdrawal of so many men for the army accentuated this. The increased cost of living, the failure at the outset to regulate matters affecting production and labor upset the former balance of economic laws of supply and demand, with the result that labor found itself in the position of having the balance of power. The extravagant and disproportionate increase in wages and the unregulated competition of government departments, munition plants and private enterprises caused such a degree of unrest that the government was compelled to interfere or else face the possibility of failure of winning the war.

The governmental agencies set up in the various wage adjustment boards, at first working independently, then in the so-called War Labor Board and War Labor Policies Board, unquestionably have served a purpose, but for one reason or another have failed to win the confidence of any great portion of the country. The war has now ceased. The labor problem stands in higher relief as the great problem facing the American people today. The question before organized business is, will they be far-sighted in formulating a declaration of right principles on which they can meet employes and the public on a new forum where sound industrial relations can be secured and maintained not by a measure of economic strength as in the past but by the rule of reason.

There are four ways in which this problem will be considered. *First*, a set of federal industrial courts after the plan of the Australian system, through which compulsory arbitration is virtu-

¹Address delivered before The War Emergency Congress of the United States Chamber of Commerce, Atlantic City, N. J., December 4-6, 1918.

ally in force, with a huge governmental machinery set up to carry it out. The experiences of the war period hardly tended to increase the confidence in or the desire to further on any large scale governmental interference in this delicate and complex problem. There is the *second* plan of wage adjustment boards set up by the industries themselves and their employes with equal representation on each side. These boards should in advance determine and agree on standards of wages, hours and conditions of employment, in which both parties interested should have an equal voice. Such boards today in many large industries are working well. The most important contribution which the War Labor Policies Board has made has been its attempt to further this plan in such industries as the metals, needles trades, and building trades. The *third* method of approaching the problem of industrial relations is to hold that since labor and management are in an irreconcilable conflict, proper procedure is merely to keep up the fight until one side is beaten or things get so bad that the country at large will take a hand. The *fourth* plan is simply to let things drift to an approximation of a *status quo ante*, which very few believe is either sound or wise.

The second plan, it seems to me, is the only possible safeguard for management and is sound in business principles and in ethics. Farseeing business men today would do well to speak in no misunderstood fashion and declare the principles for which they stand. They must be ready to meet the situation squarely with a full knowledge of economic law and the laws of society. There are certain principles on which wage adjustment boards by industries are founded. An outstanding part of the plan is to grant representation within shops, on the theory that the employes are entitled to a voice in determining the conditions under which they work. Other principles which should govern and on which any wise action can be taken are the following:

(1) The recognition that industrial enterprises are the source of livelihood to workers as well as to employers and should be conducted with a view of the greatest opportunity for all concerned.

(2) That much of the industrial unrest is caused by irregularity of employment which can be lessened greatly if industries and communities will face this problem and feel it is their responsibility, and coöperate to standardize methods, customs and styles,

to give regularity of employment. The conservation measures of the War Industries Board have shown to what extent improvements in manufacturing methods and production can be made when industries are willing to standardize. So also on regularity of employment equal improvements can be made.

(3) The right of workers to organize in joint action not inimical to the general welfare cannot be denied. Such recognition, however, must be joined with responsibility of both parties to the faithful observance of collective agreements and coöperation with the management to promote the efficiency of the establishment as a whole.

(4) Impartial agencies such as outlined above must be set up to interpret agreements and to apply them in particular cases and to make prompt and authoritative settlements.

(5) The right of all workers, including common laborers, to a living wage is declared.

(6) When the volume of business declines, wages should be the last item to be cut down. It has been demonstrated that high wages and national prosperity are corollaries.

(7) Wherever there is a standardized wage there should be a definite standardized measure of performance and all workers have a right to compensation in proportion to their individual accomplishments, ability and service.

In any plants where there are sufficient numbers of employed, where the personal relations of the proprietor are more or less lost, the interests of the employes should be delegated to some one person as a labor manager or director of personnel who should have charge of this function of business. It is my conviction that the Chamber of Commerce could do no more useful work than furthering throughout the business interests of the country the idea of the importance of the employment manager by which industries and corporations shall have a department which is sensitive and responsive to the grievances and aspirations of the employes.

In panic times, the country realizes the inflexibility of the present methods of distributing labor. The Labor Department has established a system of public employment offices. I believe that in theory this is just as sound for the flexibility of labor as the Federal Reserve Board is for the flexibility of currency. These.

however, should not be contaminated with a political influence. The practice should be extended by decentralized control through local agencies made up of representatives of employers and employes and the public should control such agencies and a high standard of efficiency be reached.

Unless a study of underlying social conditions in Germany, in Russia, in Great Britain, as well as in our own country, will disclose strong currents setting in definite directions, it is the responsibility of wise business men through organization to discover these currents and help to direct them into proper channels. This cannot be done by ignoring the great problem of industrial relations or simply fighting organized labor. The sound solution of this great problem will determine the future political, economic and social stability as well as the industrial prosperity of this great country. Shall the only big organization representative of business in its broadest sense throughout the country remain silent on this subject? Is there any more important business problem? Shall it lead the way and declare a set of principles about which business may rally and which shall serve as a guide to governmental action so far as it is required, in addition to what the business men of the country in conjunction with the workers accomplish by their own means?

Representation in Industry¹

By JOHN D. ROCKEFELLER, JR.

AT last the war is over. Less than a month ago every nerve was being strained for the purpose of enlisting, training and equipping four million men to reinforce, as speedily as possible, the battle-worn but unyielding forces of our Allies. Every wheel in industry was turning at top speed to supply munitions and the necessities of war. The peoples engaged in the conflict stood ready to stake their all on the outcome of the struggle. The future of civilization hung in the balance. Was the iron heel to trample ruthlessly on humanity, or was right to triumph over might?

In the contest, millions of lives have been sacrificed; billions of dollars expended; rich treasure destroyed; cities, towns and villages laid waste; vast stretches of country desolated. No one can estimate the human suffering, misery and sorrow involved. But now, thanks to the indomitable courage of the Allied nations, backed by our gallant troops, the issue has been fought out and tyranny overthrown.

The war has taught many lessons; one of the most useful is the value of coöperation. The successful outcome of the conflict was largely the result of the most complete coöperation. Irrespective of race, color or creed, men worked and fought and suffered and died, side by side. The kinship of humanity has come to be understood as never before. Common danger, common toil and common suffering have developed the spirit of brotherhood.

Today we stand at the threshold of the period of reconstruction. As we address ourselves to the grave problems which confront us, problems both national and international, we may look for success in their solution just in so far as we continue to be animated by the spirit of coöperation and brotherhood. The hope of the future lies in the perpetuation of that spirit. Only as those who sit around the peace table are imbued with it will their efforts result in an outcome at all² commensurate with the price which has been paid for peace.

¹ Address (revised) delivered before The War Emergency Congress of The United States Chamber of Commerce, Atlantic City, December 4-6, 1918.

In international affairs America has seen clearly the fundamentals of reconstruction, and has sought to enhance human well-being by coöperation among nations and the establishment of conditions which make coöperation possible. It is to be hoped that upon the problems of national reconstruction she will bring to bear the same clearness of vision and the same high purpose. Among these problems none is more important than that of industry, none more pressing, since industry touches almost every department of life. It is this theme, or, more particularly, the one phase "Representation in Industry," that I desire briefly to develop.

We must ask ourselves at the outset certain fundamental questions. First,—What is the purpose of industry? Shall we cling to the conception of industry as an institution primarily of private interest, which enables certain individuals to accumulate wealth, too often irrespective of the well-being, the health and the happiness of those engaged in its production? Or shall we adopt the modern viewpoint and regard industry as being a form of social service, quite as much as a revenue producing process?

Is it not true that any industry, to be permanently successful, must insure to labor adequately remunerative employment under proper working and living conditions, to capital a fair return upon the money invested, and to the community a useful service. The soundest industrial policy is that which has constantly in mind the welfare of employes as well as the making of profits, and which, when human considerations demand it, subordinates profits to welfare. Industrial relations are essentially human relations. It is therefore the duty of everyone entrusted with industrial leadership to do all in his power to improve the conditions under which men work and live.

The day has passed when the conception of industry as chiefly a revenue producing process can be maintained. To cling to such a conception is only to arouse antagonisms and to court trouble. In the light of the present, every thoughtful man must concede that the purpose of industry is quite as much the advancement of social well-being as the accumulation of wealth. It remains none the less true, however, that to be successful, industry must not only serve the community and the workers adequately, but must also realize a just return on capital invested.

Next, we must ask ourselves, who are the parties to industry? The parties to industry are four in number; they are capital, management, labor and the community. Capital is represented by the stockholders and is usually regarded as embracing management. Management is, however, an entirely separate and distinct party to industry,—its function is essentially administrative; it comprises the executive officers, who bring to industry technical skill and managerial experience. Labor consists of the employes. Labor, like capital, is an investor in industry, but labor's contribution, unlike that of capital, is not detachable from the one who makes it, since it is in the nature of physical effort and is a part of the worker's strength and life.

Here the list usually ends. The fourth party, namely the community, whose interest is vital, and in the last analysis controlling, is too often ignored. The community's right to representation in the control of industry and in the shaping of industrial policies is similar to that of the other parties. Were it not for the community's contribution in maintaining law and order, in providing agencies of transportation and communication, in furnishing systems of money and credit, and in rendering other services,—all involving continuous outlays,—the operation of capital, management and labor would be enormously hampered, if not rendered well-nigh impossible. The community, furthermore, is the consumer of the product of industry and the money which it pays for the product reimburses capital for its advances and ultimately provides the wages, salaries and profits that are distributed among the other parties.

We must next inquire,—What are the relations between the four parties to industry? It is frequently maintained that the parties to industry must necessarily be hostile and antagonistic. I am convinced that the opposite is true; that they are not enemies but partners; and that they have a common interest. Moreover, success cannot be brought about through the assumption by any one party of a position of dominance and arbitrary control; rather is it dependent upon the coöperation of all four. Partnership, not enmity, is the watchword.

If the coöperation between these interests is sound business and good social economics, why, then, is antagonism so often found in its stead? The answer is revealed in a survey of the development of industry.

In the early days of industry, the functions of capital and management were not infrequently combined in the one individual, who was the employer. He in turn was in constant touch with his employees. Together they formed a vital part of the community. Personal relations were frequent and mutual confidence existed. When differences arose they were quickly adjusted. As industry developed, aggregations of capital larger than a single individual could provide were required. In answer to this demand, the corporation, with its many stockholders, was evolved. Countless workers took the place of the handful of employees of earlier days. Plants scattered all over the country superseded the single plant in a given community. Obviously, this development rendered impossible the personal relations which had existed in industry and lessened the spirit of common interest and undertaking. Thus the door was opened to suspicion and distrust; enmity crept in; antagonisms developed. The parties to industry came to view each other as enemies, instead of as friends and partners, and to think of their interests as antagonistic rather than common.

It is to be regretted that there are capitalists who regard labor as their legitimate prey, from whom they are justified in getting all they can for as little as may be. It is equally to be deplored that on the part of labor there is often a feeling that it is justified in wresting everything possible from capital. Where such attitudes have been assumed, a gulf has opened between capital and labor which has continually widened. Thus the two forces have come to work against each other, each seeking solely to promote its own selfish ends. As a consequence have come all too frequently the strike, the lockout and other incidents of industrial warfare.

Then, too, as industry has become increasingly specialized, the workman of today, instead of following the product through from start to finish and being stimulated by the feeling that he is the sole creator of a useful article as was more or less the case in early days, now devotes his energies for the most part to countless repetitions of a single act or process, which is but one of perhaps a hundred operations necessary to transform the raw material into the finished product. The worker loses sight of the significance of the part he plays in industry and feels himself to be merely one of many cogs in a wheel. All the more, there-

fore, is it necessary that he should have contact with men engaged in other processes and fulfilling other functions in industry, that he may still realize he is a part, and a necessary though it may be inconspicuous part, of a great enterprise.

In modern warfare, those who man the large guns find the range not by training the gun on the object which they are seeking to reach, but in obedience to a mechanical formula which is worked out for them. Stationed behind a hill or mound, they seldom see the object at which their deadly fire is directed. One can readily imagine the sense of detachment and ineffectiveness which must come over those men. But when the airplane, circling overhead, gets into communication with the gunner beneath and describes the thing to be accomplished and the effectiveness of the shot, a new meaning comes into his life. In a second he has become a part of the great struggle. He knows that his efforts are counting, that he is helping to bring success to his comrades. There comes to him a new enthusiasm and interest in his work.

The sense of isolation and detachment from the accomplishments of industry which too often comes to the workers of today can be overcome only by contact with the other contributing parties. Where such contact is not possible directly, it must be brought about indirectly through representation. In this way only can common purpose be kept alive, individual interests safeguarded and the general welfare promoted. The coöperation in war service of labor, capital, management and government has afforded a striking and most gratifying illustration of this truth.

The basic principles governing the relations between the parties to industry are as applicable in the successful conduct of industry today as in earlier times. The question which now confronts the student of industrial problems is how to reëstablish personal relations and coöperation in spite of changed conditions. The answer is not doubtful or questionable, but absolutely clear and unmistakable. It is, through adequate representation of the four parties, in the councils of industry.

Various methods of representation have been developed, conspicuous among which are those of labor unions and employers' associations. As regards the organization of labor, it is just as proper and advantageous for labor to associate itself into organ-

ized groups for the advancement of its legitimate interests as for capital to combine for the same objects. Such associations of labor manifest themselves in collective bargaining, in an effort to secure better working and living conditions, in providing machinery whereby grievances may easily and without prejudice to the individual be taken up with the management. Sometimes they provide benefit features, sometimes they seek to increase wages, but whatever their specific purpose,—so long as it is to promote the well-being of the employes, having always due regard for the just interests of the employer and the public, leaving every worker free to associate himself with such groups or to work independently, as he may choose,—they are to be encouraged.

But organization is not without its dangers. Organized capital sometimes conducts itself in an unworthy manner, contrary to law and in disregard of the interest both of labor and the public. Such organizations cannot be too strongly condemned or too vigorously dealt with. Although they are the exception, such publicity is generally given to their unsocial acts that all organizations of capital, however rightly managed or broadly beneficent, are thereby brought under suspicion.

Likewise it sometimes happens that organizations of labor are conducted without just regard for the rights of the employer or of the public; methods and practices are adopted which, because unworthy or unlawful, are deserving of public censure. Such organizations of labor bring discredit and suspicion upon other organizations which are legitimate and useful, just as is the case with improper organizations of capital, and they should be similarly dealt with.

We ought not, however, to allow the occasional failure in the working of the principle of the organization of labor to prejudice us against the principle itself, for the principle is fundamentally sound. In the further development of the organizations of labor and of large business, the public interest as well as the interest of labor and of capital will be furthest advanced by whatever stimulates every man to do the best work of which he is capable; by a fuller recognition of the common interests of employers and employed; and by an earnest effort to dispel distrust and hatred and to promote good-will.

Labor unions have secured for labor in general many advantages in hours, wages and standards of working conditions. A large proportion of the workers of the country, however, are outside of these organizations, and unless otherwise represented are not in a position to bargain collectively. Therefore, representation of labor to be adequate must be more comprehensive and all inclusive than anything thus far attained.

Representation on the employers' side has been developed through the establishment of trade associations, the purpose of which is to discuss matters of common interest and to act in so far as is legally permissible and to the common advantage along lines that are generally similar. But here also representation is inadequate. Many employers do not belong to employers' associations.

Since the United States went into the war, the representation of both labor and capital in common councils has been brought about through the War Labor Board, composed equally of men from the ranks of labor and capital, together with representatives of the public. When differences have arisen in industries where there was no machinery to deal with such matters, the War Labor Board has stepped in and made its findings and recommendations. In this way, relatively continuous operation has been made possible and the resort to the strike and lockout has been less frequent.

In England there have been made during the past year three important government investigations and reports looking toward a more complete program of representation and coöperation on the part of labor and capital. The first is commonly known as the Whitley Report, made by the Reconstruction Committee, now the Ministry of Reconstruction, through a Sub-Committee on Relations between Employers and Employed, of which the Rt. Hon. J. H. Whitley, M.P., was chairman.

To a single outstanding feature the Whitley Report owes its distinction. It applies to the whole of industry the principle of representative government. In brief, its recommendations are that, in the various industries and trades, there should be formed joint industrial councils,—national, district and "works." Labor and capital are to be equally represented in each and the councils presided over by impartial or neutral officers. These recom-

mendations are of additional interest and value in that at once the existing forms of organization, both of labor and capital, are availed of and made the basis for the new coöperative councils with such additions only as may be necessary.

The national councils would be composed of representatives of the national trades unions on the one hand, and representatives of the national employers' associations on the other. District councils would include representatives of district trades unions and employers' associations. In the works councils or works committees, as they are commonly called, representatives of employers and employes would sit together in joint conference and would be in close coöperation with the national councils. The function of the works committees is to establish better relations between employers and employed by granting to the latter a larger share in the consideration of matters with which they are concerned.

The Whitley Plan seeks to unite the organizations of labor and of capital by a bond of common interest in a common venture; it changes at a single stroke the attitude of these powerful aggregations of class interest from one of militancy to one of social service; it establishes a new relation in industry. "Problems old and new," says the report, "will find their solution in a frank partnership of knowledge, experience and good-will."

Another investigation and report was made by a commission on industrial unrest, appointed by the Prime Minister. This commission made, among others, the following interesting recommendations:

1. That the principle of the Whitley Report as regards industrial councils be adopted.
2. That each trade should have a constitution.
3. That labor should take part in the affairs of industry as partners rather than as employes in the narrow sense of the term.
4. That closer contact should be set up between employers and employed.

The third report was prepared by the Ministry of Labor. This report deals with the constitution and operation of works committees in a number of industries. It is a valuable treatise on the objects, functions and methods of procedure of joint committees.

These reports, together with a report on reconstruction made by the British Labor Party, outlining its reconstruction program—

a most comprehensive and thoughtful document—indicate something of the extent and variety of the study which has been given to the great problem of industrial reconstruction in England. All point toward the need of more adequate representation of labor in the conduct of industry and the importance of closer relations between labor and capital.

Further light has been thrown on the general questions treated by those inquiries in an able report made by the Garton Foundation on "The Industrial Situation after the War." This report is a study of the more permanent causes of industrial friction and inefficiency, and of the means by which they may be removed or their action circumscribed.

A method of representation similar to that suggested in the Whitley Report, though less comprehensive, and which is constructed from the bottom up, has been in operation for varying periods of time in a number of industries in this country, including the Standard Oil Company of New Jersey, the Colorado Fuel & Iron Company, the Consolidation Coal Company and others. This plan of representation is worthy of serious consideration. It begins with the election of representatives in a single plant, and is capable of indefinite development to meet the complex needs of any industry and of wide extension so as to include all industries. Equally applicable in industries where union or non-union labor or both are employed, it seeks to provide full and fair representation to labor, capital and management, taking cognizance also of the community. Thus far it has developed a spirit of coöperation and goodwill which commends it to both employer and employe.

The outstanding features of this plan of industrial representation are as follows:

Representatives chosen by the employes in proportion to their number, from their fellow workers in each plant, form the basis of the plan. Joint committees, composed of equal numbers of employes or their representatives and of officers of the company, are found in each plant or district. These committees deal with all matters pertaining to employment, and working and living conditions, including questions of coöperation and conciliation, safety and accident, sanitation, health and housing, recreation and education. Joint conferences of representatives of employes

and officers of the company are held in the various districts several times each year. There is also an annual joint conference, at which reports from all districts are received and considered.

Another important feature of the plan is an officer known as the President's Industrial Representative, whose duty it is to visit the plants currently and confer with the employes' representatives, as well as to be available always for conference at the request of the representatives. Thus the employes, through their representatives chosen from among themselves, are in constant touch and conference with the management and representatives of the stockholders in regard to matters pertaining to their common interest.

The employes' right of appeal is a third outstanding feature of the plan. Any employe with a grievance, real or imaginary, may go with it at once to his representatives. The representatives not infrequently find there is no ground for the grievance and are able to so convince the employe. But if a grievance does exist, or dissatisfaction on the part of the employe continues, the matter is carried to the local boss, foreman or superintendent, with whom in the majority of cases it is amicably and satisfactorily settled. Further appeal is open to the aggrieved employe, either in person or through his representatives, to the higher officers and to the president. If satisfaction is not to be had from the company, the court of last appeal may be the Industrial Commission of the State, the State Labor Board, or a committee of arbitration.

Experience shows that the vast majority of difficulties which occur in an industry arise between the workmen and the subordinate officers who are in daily contact with them. Petty officials are sometimes arbitrary, and it is by their attitude and action that the higher officers and the stockholders are judged. Obviously the right of appeal from the decisions of subordinate officials is important, even if seldom availed of, because it tends of itself to modify their attitude.

A further feature of the plan is what may be termed the Employes' Bill of Rights. This covers such matters as the right to caution and suspension before discharge, except for such serious offenses as are posted; the right to hold meetings at appropriate places outside of working hours; the right without discrimination

to membership or non-membership in any society, fraternity or union; and the right of appeal.

Where this plan has been in operation for a considerable length of time, some of the results obtained are:

First: Uninterrupted operation of the plants and continuous employment of the workers, resulting in larger returns for both capital and labor.

Second: Improved working and living conditions.

Third: Frequent and close contact between employes and officers.

Fourth: The elimination of grievances as disturbing factors.

Fifth: Good-will developed to a high degree.

Sixth: The creation of a community spirit.

Furthermore, the plan has proved an effective means of enlisting the interest of all parties to industry, of reproducing the contacts of earlier days between employer and employe, of banishing misunderstanding, distrust and enmity, and securing coöperation and the spirit of brotherhood. Under its operation, the participants in industry are being convinced of the soundness of the proposition that they are fundamentally friends and not enemies; that their interests are common, not opposed. Moreover, prosperity, good-will and happiness are resulting. Based as the plan is upon principles of justice to all, its success can be counted on so long as it is carried out in a spirit of sincerity and fair play.

Here, then, would seem to be a method of providing representation which is just, which is effective, which is applicable to all employes whether organized or unorganized, to all employers whether in associations or not, which does not compete or interfere with existing organizations or associations, and which, while developed in a single industrial corporation as a unit, may be expanded to include all corporations in the same industry and ultimately all industries. Just what part labor organizations and employers' associations can best take in such a plan remains to be worked out, but certain it is that some method should be devised which will profit to the fullest extent by the experience, the strength and the leadership of these groups. While defects will doubtless appear in this plan, and other methods more successfully accomplishing the same end may be developed, at least it is

proving that in unity there is strength, and that a spirit of coöperation and brotherhood in industry is not only idealistically right but practically workable.

If the points which I have endeavored to make are sound, might not the four parties to industry subscribe to an industrial creed somewhat as follows:

1. I believe that labor and capital are partners, not enemies; that their interests are common, not opposed; and that neither can attain the fullest measures of prosperity at the expense of the other, but only in association with the other.

2. I believe that the community is an essential party to industry and that it should have adequate representation with the other parties.

3. I believe that the purpose of industry is quite as much to advance social well-being as material prosperity; that, in the pursuit of that purpose, the interests of the community should be carefully considered, the well-being of employes fully guarded, management adequately recognized and capital justly compensated, and that failure in any of these particulars means loss to all four parties.

4. I believe that every man is entitled to an opportunity to earn a living, to fair wages, to reasonable hours of work and proper working conditions, to a decent home, to the opportunity to play, to learn, to worship and to love, as well as to toil, and that the responsibility rests as heavily upon industry as upon government or society, to see that these conditions and opportunities prevail.

5. I believe that diligence, initiative and efficiency, wherever found, should be encouraged and adequately rewarded, and that insolence, indifference and restriction of production should be discountenanced.

6. I believe that the provision of adequate means of uncovering grievances and promptly adjusting them is of fundamental importance to the successful conduct of industry.

7. I believe that the most potent measure in bringing about industrial harmony and prosperity is adequate representation of the parties in interest; that existing forms of representation should be carefully studied and availed of in so far as they may be found to have merit and are adaptable to conditions peculiar to the various industries.

8. I believe that the most effective structure of representation is that which is built from the bottom up; which includes all employees; which starts with the election of representatives and the formation of joint committees in each industrial plant, proceeds to the formation of joint district councils and annual joint conferences in a single industrial corporation, and admits of extension to all corporations in the same industry, as well as to all industries in a community, in a nation, and in the various nations.

9. I believe that the application of right principles never fails to effect right relations; that "the letter killeth but the spirit giveth life"; that forms are wholly secondary, while attitude and spirit are all important and that only as the parties in industry are animated by the spirit of fair play, justice to all and brotherhood, will any plan which they may mutually work out succeed.

10. I believe that that man renders the greatest social service who so coöperates in the organization of industry as to afford to the largest number of men the greatest opportunity for self-development and the enjoyment of those benefits which their united efforts add to the wealth of civilization.

In the days when kings and queens reigned over their subjects, the gratification of the desires of those in high places was regarded as of supreme moment, but in these days the selfish pursuit of personal ends at the expense of the group can and will no longer be tolerated. Men are rapidly coming to see that human life is of infinitely greater value than material wealth; that the health, happiness and well-being of the individual, however humble, is not to be sacrificed to the selfish aggrandisement of the more fortunate or more powerful. Modern thought is placing less emphasis on material considerations. It is recognizing that the basis of national progress, whether industrial or social, is the health, efficiency and spiritual development of the people. Never was there a more profound belief in human life than today. Whether men work with brain or brawn, they are human beings, and are much alike in their cravings, their aspirations, their hatreds, and their capacity for suffering and for enjoyment.

As the leaders of industry face this period of reconstruction, what will be their attitude? Will it be that of the stand-patters, who ignore the extraordinary changes which have come over the face of the civilized world and have taken place in the minds of

men; who, arming themselves to the teeth, attempt stubbornly to resist the inevitable and invite open warfare with the other parties in industry; and who say, "What has been and is, must continue to be,—with our backs to the wall we will fight it out along the old lines or go down in defeat." Those who take such an attitude are wilfully heedless of the fact that its certain outcome will be financial loss, general inconvenience and suffering, the development of bitterness and hatred, and in the end submission to far more drastic and radical conditions imposed by legislation, if not by force, than could now be sociably arrived at through mutual concession in a friendly conference.

Or will their attitude be one in which I myself profoundly believe, which takes cognizance of the inherent right and justice of the principles underlying the new order; which recognizes that mighty changes are inevitable, many of them desirable; and which does not wait until forced to adopt new methods, but takes the lead in calling together the parties to industry for a round-table conference to be held in a spirit of justice, fair play and brotherhood, with a view to working out some plan of coöperation which will insure to all those concerned adequate representation, and afford to labor an opportunity to earn a fair wage under such conditions as shall leave time not alone for food and sleep, but also for recreation and the development of the higher things of life?

Never was there such an opportunity as exists today for the industrial leader with clear vision and broad sympathy, permanently to bridge the chasm that is daily gaping wider between the parties of industry, and to establish a solid formation for industrial prosperity, social improvement and national solidarity. Future generations will rise up and call those men blessed who have the courage of their convictions, a proper appreciation of the value of human life as contrasted with material gain, and who, imbued with the spirit of brotherhood, will lay hold of the great opportunity for leadership which is open to them today.

In conclusion let it be said that upon the heads of these leaders—it matters not to which of the four parties they belong—who refuse to reorganize their industrial households in the light of modern spirit, will rest the responsibility for such radical and

drastic measures as may later be forced upon industry if the highest interests of all are not shortly considered and dealt with in a spirit of fairness. Who, I say, dares to block the wheels of progress and to let pass the present opportunity of helping to usher in a new era of industrial peace and prosperity?

Labor Standards After the War

By SAMUEL GOMPERS

THE affairs of the whole world are in the process of remaking. Relations between nation and nation, and between the peoples within the various nations, and among working people particularly, are undergoing a new change and a new life.

We are accustomed in these last few years to talk about reconstruction, the reconstruction of personal, political and industrial relations in the whole world. There are peoples who believe that the form of reconstruction must be elevation of the masses of the working people of the world. Among those are the people who believe that the principles for which the world war was waged, freedom and justice and democracy, shall find their true expression in every day life.

On the other hand, the old-time masters of the political and industrial world have not lost their hope to maintain their domination over the people. They are the old Bourbons of the whole world. Among them are some employers of labor in the United States, particularly the National Manufacturers' Association and the association of employers called the National Founders' Association. William H. Barr, of Buffalo, president of the latter association, obtained a moment's newspaper publicity by demanding at its annual conference abolition of the national eight-hour working day and a lowering of the war-time wage scale as essential if American mines and factories are to continue to compete in the world of trade. An accompanying suggestion that excessive war prices of commodities be lowered failed to appear.

There are some people who do not understand—there are some people who will not understand—all that was meant by the willingness of the people of the democracies to fight and make the sacrifices in order that a better time shall come to the workers. It was said of the Bourbons of France that, having learned nothing, they could forget nothing, and some employers of the United States, typified by Mr. Barr, are the Bourbons of our country. The same character of information has come from various quarters, but the American working people will not be forced back by Barr, his association, or all the Bourbons in the United States.

The time has come when the working people of the world are coming into their own. They have new rights and new advantages, they have made the sacrifices, and they are going to enjoy the better times for which the whole world has been in convulsion.

The American labor movement whole-heartedly supported this world struggle. The American labor movement went to the full-lengths in support of that struggle, and we knew what was involved. The day of absolutism in industry is gone, just as absolutism in government has been destroyed.

The American labor movement will coöperate with all other agencies to help in this reconstruction time. Our movement is not to destroy, but to construct,—but all may just as well understand now as at any other time that the advantages which the workers of America and of the Allied countries have gained, and which we hope to extend to the people even of the conquered countries, are not going to be taken away from us, and that we will resist to the uttermost any attempt to take them away.

The principal danger is that we may at some time in the future revert to the old conditions of unemployment. The continually increasing cost of living entails the necessity of continually increasing wages, but a surplus in the labor market makes it difficult, if not impossible, for wages to keep pace with living costs. Intermittent employment with low wages is one of the chief causes of poverty with its accompanying misery and its social and personal demoralization. Reasonable farsightedness in readjustment will obviate a labor surplus. We have a right to demand, and we do demand, that such reasonable farsightedness be exercised. The American Federation of Labor expects governments—national, state and local—to adopt every measure necessary to prevent unemployment. During the coming period of reconstruction every wage-earner should be afforded the opportunity of suitable employment and an income and sustenance sufficient to enable him, without the labor of mother and children, to maintain himself and family in health and comfort, and to provide a competence for old age with ample provision for recreation and good citizenship. Governments should:—

(a) Prepare and inaugurate plans to build model homes for the wage-earners;

(b) Establish a system of credits whereby the workers may

borrow money for a long term of years at a low rate of interest to build their own homes;

(c) Encourage, protect and extend credit to voluntary, non-profitmaking and joint tenancy associations;

(d) Exempt from taxation and grant other subsidies for houses constructed for the occupancy of their owners;

(e) Relieve municipalities from the restrictions preventing them from undertaking proper housing plans;

(f) Encourage and support the erection and maintenance of houses where workers may find lodging and nourishing food during the periods of unemployment.

Much talk has been made about preparing plans for the construction of public buildings, roads and other public works in order to avoid unemployment. All such suggestions are good, in so far as these things are needed, and no farther. There can be no question, however, of the urgent, immediate need of great numbers of wholesome houses at reasonable costs for working people. The environment offered by many of the tenements is unfit to surround the growing children of a free republic. The revolting conditions in many tenement districts, without sufficient light, air or play spaces, tend to produce persons unfit for citizenship. Squalor and almost unlivable conditions are still found in many houses of the workers whose compensation is inadequate, where opportunity to associate with their fellow-workmen for their moral, intellectual and industrial improvement is persistently and successfully denied. Such housing should not be permitted to exist.

The employment of public funds in the provision of homes for workers is a far better investment than large expenditures on ornamental buildings and beautiful boulevards seldom, if ever, seen by the poor. If large expenditures of public money are needed to avoid unemployment, the construction of houses is of far greater public benefit, especially to the poor, promoting health, happiness and good citizenship. Moreover, such investments have the added merit of returning to the public treasury without loss, and even with gain.

There is developing very rapidly a public demand that every worker shall be provided with a decent, sanitary and comfortable home. The wage-earners of America are deserving of this new

conception of living and are entitled to no less. This, then, is the inspiration, the motive of one of the ultimate objects of the American Federation of Labor.

The demand of the wage-earners is not only for sanitary and fit houses to live in, but that a sufficient number of houses shall be available so that they may be freed from the evils of high rents, overcrowding and congestion. The ordinary method of supplying houses through their erection by private capital for investment and speculation has rarely, if ever, been adequate. Nearly all of our workmen's habitations are built on a system of exploitation. Most of the houses built for the wage-earners are built to sell. This system of exploitation does not permit of proper housing facilities and adequate upkeep.

Our present practices and policies for housing the workers are unjust. We demand that every wage-earner shall be afforded the opportunity of living in a healthful, wholesome dwelling and environment which shall tend to uplift and not debase. The safety of the republic is not promoted, nor its standard of citizenship elevated, by the streams of persons reared in slums and unsanitary tenements.

The fact that there is danger of unemployment, a shortage of food stuffs and demoralizing congestion of population, while there are hundreds of millions of acres of agricultural, suburban and urban lands lying idle, should make a deeper impression upon public thought than it has heretofore done. We should no longer hesitate in forcing unused lands into use by exempting all improvements from taxation and by placing a tax on non-productive the same as on productive land. Regular employment, comfortable homes, necessities at reasonable cost and an adequate income are urgent demands. Reconstruction will fail unless these conditions are attained.

To attain them the workers must be assured that they are guaranteed and encouraged in the exercise of their right to organize and associate with their fellow-workmen in the trade unions and deal collectively with employers through such representation of their unions as they may choose, for their improved economic and industrial conditions and relations.

Perhaps the following might be regarded as a summary of demands to be satisfied in the pending readjustment of conditions.

No wage reductions.

No lengthening of the working day.

Opportunity for suitable, regular, remunerative employment.

A workday of not more than eight hours; a work week of not more than five and a half days.

Protection for women and children from overwork, underpay and unsuitable employment.

Increased opportunity for both education and play for children.

The elimination of private monopolies and protection from the extortions of profiteers.

Final disposition of the railroads, telegraph, telephone and cable systems to be determined by consideration of the rights and interests of the whole people, rather than the special privileges and interests of a few.

Comfortable, sanitary homes in wholesome environment, rather than elaborate improvements of no special benefit to the masses of the people.

Heavier taxation of idle lands, to the end that they may be used for the public good.

A government made more responsive to the demands of justice and the common good by the adoption of initiative and referendum measures.

In a word, any and all measures shall be taken tending toward constant growth and development of the economic, industrial, political, social and humane conditions for the toilers, to make life the better worth living, to develop all that is best in the human being and making for the whole people a structure wherein each will vie with the other in the establishment of the highest and best concepts and ideals of the human family.

Resolutions on Reconstruction of the British Labor Party¹

I. THE TASK OF SOCIAL RECONSTRUCTION

THAT, in the opinion of the conference, the task of social reconstruction to be organized and undertaken by the government, in conjunction with the local authorities, ought to be regarded as involving, not any patchwork jerrymandering of the anarchic individualism and profiteering of the competitive capitalism of pre-war time—the breakdown of which, even from the standpoint of productive efficiency, the war has so glaringly revealed—but the gradual building up of a new social order, based not on internecine conflict, inequality of riches, and dominion over subject classes, subject races, or a subject sex, but on the deliberately planned coöperation in production, distribution and exchange, the systematic approach to a healthy equality, the widest possible participation in power, both economic and political, and the general consciousness of consent which characterize a true democracy; and, further, in order to help to realize the new social order and to give legislative effect to the labor policy on reconstruction, this conference emphasizes the necessity of having in Parliament and the country a vigorous, courageous, independent, and unfettered political party.

II. THE NEED FOR INCREASED PRODUCTION

That the conference cannot help noticing how very far from efficient the capitalist system has been proved to be, with its stimulus of private profit, and its evil shadow of wages driven down by competition often below subsistence level; that the

¹ These resolutions appeared in *The Survey* for August 3, 1918 and were published in conjunction with an article by Arthur Gleason which is embodied in a book, now in press, "British Labour and the War," by Arthur Gleason and Paul U. Kellogg; (Hoe & Liveright, \$2.)

The resolutions as here given embody part but not all of the proposed reconstruction program of the British Labor Party entitled "Labor and the New Social Order." This document was a report on "Reconstruction" by a sub-committee of the British Labor Party and was published in full as a supplement to the February 16, 1918 issue of the *New Republic*. Comparison of the two documents will be of interest to many readers. Such a comparison will show for example that the document printed in this volume does not emphasize so specifically the disposal of "the surplus wealth for the common good,"—using surplus to mean that part of the national income over and above the national minimum of subsistence.

conference recognizes that it is vital for any genuine social reconstruction to increase the nation's aggregate annual production, not of profit or dividend, but of useful commodities and services; that this increased productivity is obviously not to be sought in reducing the means of subsistence of the workers, whether by hand or by brain, nor yet in lengthening their hours of work, for neither "sweating" nor "driving" can be made the basis of lasting prosperity, but in the socialization of industry in order to secure

- (a) the elimination of every kind of inefficiency and waste;
- (b) the application both of more honest determination to produce the very best, and of more science and intelligence to every branch of the nation's work; together with
- (c) an improvement in social, political, and industrial organization; and
- (d) the indispensable marshaling of the nation's resources so that each need is met in the order of, and in proportion to, its real national importance.

III. THE MAINTENANCE AND PROTECTION OF THE STANDARD OF LIFE

(1) That the conference holds that it is of supreme national importance that there should not be any degradation of the standard of life of the population; and it insists that it is accordingly the duty of the government to see to it that, when peace comes, the standard rates of wages in all trades should, relatively to the cost of living, be fully maintained.

(2) That it should be made clear to employers that any attempt to reduce the prevailing rates of wages when peace comes, or to take advantage of the dislocation of demobilization to worsen the conditions of labor, will certainly lead to embittered industrial strife, which will be in the highest degree detrimental to the national interests; and the government should therefore take all possible steps to avert such a calamity.

(3) That the government should not only, as the greatest employer of labor, set a good example in this respect, but should also seek to influence employers by proclaiming in advance that it will not attempt to lower the standard rates or conditions in public employment, by announcing that it will insist on the most rigorous observance of the fair wages clause in public contracts, and by recommending every local authority to adopt the same policy.

(4) That one of the most urgent needs of social reconstruction

is the universal application of the principle of the protection of the standard of life, at present embodied in the factories, work-shops, merchant shipping, mines, railways, shops, truck, and trade boards acts, together with the corresponding provisions of the public health, housing, education, and workmen's compensation acts; that these imperfectly drafted and piecemeal statutes admittedly require extension and amendment at many points and supplementing by new legislation providing among other industrial reforms for the general reduction of the working week to forty-eight hours, securing to every worker, by hand or by brain, at least the prescribed minimum of health, education, leisure, and subsistence; and that, in particular, the system of a legal basic wage, introduced by the trade boards act, the miners (minimum wage) act, and the wage board clauses of the corn production act, needs to be extended and developed, so as to ensure to every worker of either sex, in any occupation, in any part of the kingdom, as the very lowest statutory base line of wages (to be revised with every substantial rise in prices), not less than enough to provide all the requirements of a full development of body, mind, and character, from which the nation has no right to exclude any class or section whatsoever.

IV. THE PROVISION FOR THE SOLDIERS AND SAILORS

That the conference realizes that, as soon as peace is assured, the position of the soldier or sailor will be one of great peril; that, whilst his services to the nation will be effusively praised, and promises will be made for a generous provision for his needs, there is only too much reason to fear that, unless a strong and continuous effort is made, both in Parliament and in the localities, administrative parsimony and red-tape will deprive many thousands of what is justly due to them.

The conference accordingly holds that it is imperative that the provision to be made on demobilization should not only be worked out in detail immediately, but that it should be published for general information, so that omissions may be detected, mistakes rectified, and everyone made acquainted with the steps to be taken.

The conference, noting the month's furlough, gratuity, free railway ticket, and a year's unemployment benefit if out of work already promised to the soldier, urges that

(a) there should be no gap between the cessation of his pay and separation allowance and the beginning of his unemployment benefit, and

(b) that this special ex-soldier's unemployment benefit given to all should be additional to any unemployment benefit under the National Insurance Act, to which many men are already entitled in respect of contributions deducted from their wages;

(c) That the amount of the unemployment benefit should not be the present starvation pittance of 7s. per week, but at least approaching to the combined separation and rations allowances; and

(d) that, in view of the change in the value of money, the gratuity (which should be made payable through the Post Office Savings Bank) ought to be, for the private, £20.

The conference feels, however, that what the soldiers will most seriously look to is not the sum of money doled out to them, but the provision made for ensuring them situations appropriate to their capacities and desires: it declares that this duty of placing the demobilized soldier within reach of a suitable situation at the trade union standard rate is one for the government itself to discharge, without the intervention of charity or philanthropists.

And the conference demands that the government should at once complete and make known the organization projected for fulfilling this duty, including appropriate arrangements for enabling such of the men as wish it to obtain small holdings, for others to get such training for new occupations as they require, and for all to secure such posts in productive work or service as they are capable of filling, or, in the alternative, to be maintained until such posts can be found.

V. THE DISCHARGE OF CIVILIAN WAR WORKERS

That this conference, realizing the grave industrial conditions in which demobilization will take place, demands that the same careful preparation and the same sort of provision should be made in advance for a systematic replacing in situations and for adequate maintenance until situations are found, with regard to the three million civil workers in war trades, and male or female substitutes for men now with the colors, as for the five millions to be discharged from the army.

VI. THE RESTORATION OF TRADE UNION CONDITIONS

(1) That this conference reminds the government that it is pledged unreservedly and unconditionally, and the nation with it, in the most solemn manner, to the restoration after the war of

all the rules, conditions, and customs that prevailed in the workshops before the war; and to the abrogation, when peace comes, of all the changes introduced not only in the national factories and the 5,000 controlled establishments, but also in the large number of others to which provisions of the munitions act have been applied.

(2) That the conference places on record its confident expectation and desire that if any employers should be so unscrupulous as to hesitate to fulfil this pledge, the government will see to it that, in no industry and in no district, is any quibbling evasion permitted of an obligation in which the whole labor movement has an interest.

(3) In view of the unsatisfactory character of the provisions in the munitions act dealing with the restoration of trade union customs after the war, the conference calls upon the government to provide adequate statutory machinery for restoration:—

(a) By securing that all provisions in the acts necessary to enforce restoration shall continue in operation for a full year after the restrictive provisions abrogating trade union rules, and giving munitions tribunals disciplinary powers over workmen have been terminated.

(b) By removing all restrictions upon the right of the workmen to strike for the restoration of the customs which have been abrogated.

(c) By limiting compulsory arbitration strictly to the war period and providing fully that the right to prosecute an employer for a failure to restore trade union customs shall continue for a full year after the termination of the restrictive powers in the acts.

(4) The conference further calls upon Parliament to limit all restrictive legislation directed against workpeople strictly to the war period, and, subject to the above exceptions, calls for the abrogation of the clauses restrictive of personal liberty in the munitions of war acts and in the defense of the realm acts, immediately upon the conclusion of hostilities.

(5) The conference, finally, urges that if it is considered that some of the rules, conditions, and customs are, in the industrial reorganization that is contemplated, inconsistent with the highest development of production, or injurious to other sections of workers, it is for the government, as responsible for the fulfilment of the pledge, to submit for discussion to the trade unions concerned alternative proposals for securing the standard wage and normal day, protecting the workers from unemployment, and maintaining the position and dignity of the crafts.

VII. THE PREVENTION OF UNEMPLOYMENT

That the conference cannot ignore the likelihood that the years immediately following the war will include periods of grave dislocation of profit-making industry, now in this trade or locality and now in that, when many thousands of willing workers will, if matters are left to private capitalism, probably be walking the streets in search of employment; that it is accordingly the duty of the ministry, before demobilization is actually begun, so to arrange the next ten years' program of national and local government works and services—including housing, schools, roads, railways, canals, harbors, afforestation, reclamation, etc.—as to be able to put this program in hand, at such a rate and in such districts as any temporary congestion of the labor market may require; that it is high time that the government laid aside the pretence that it has no responsibility for preventing unemployment; that now that it is known that all that is required to prevent the occurrence of any widespread or lasting unemployment is that the aggregate total demand for labor should be maintained, year in and year out, at an approximately even level, and that this can be secured by nothing more difficult or more revolutionary than a sensible distribution of the public orders for works and services so as to keep always up to the prescribed total the aggregate public and capitalist demand for labor, together with the prohibition of overtime in excess of the prescribed normal working day, there is no excuse for any government which allows such a grave social calamity as widespread or lasting unemployment ever to occur.

VIII. UNEMPLOYMENT INSURANCE

That to meet the needs of individuals temporarily out of work, the Labor Party holds that the best provision is the out-of-work pay of a strong trade union, duly supplemented by the government subvention guaranteed by Part II; of the insurance act; that the government should at once restore the subvention now withdrawn by one of the least excusable of the war economies; that this subvention ought to be increased so as to amount to at least half the weekly allowance; and that for the succor of those for whom trade union organization is not available the state unemployment benefit, raised to an adequate sum should be made

universally applicable in all industries and occupations where objection is not taken by the trade union concerned to the compulsory inclusion of its members.

IX. THE COMPLETE EMANCIPATION OF WOMEN

That the conference holds that the changes in the position of women during the war, in which they have rendered such good service, and the importance of securing to women as to men, the fullest possible opportunities for individual development, make it necessary to pay special attention in the reconstruction program to matters affecting women; and, in particular, the conference affirms—

A. With Regard to Industry on Demobilization:—

(1) That work or maintenance at fair rates should be provided for all women displaced from their employment to make way for men returning from service with the forces or other national work.

(2) That full inquiry should be made into trades and processes previously held to be unhealthy or in any way unsuitable for women, but now being carried on by them, with a view to making recommendations as to the conditions of their further employment in such trades.

(3) That all women employed in trades formerly closed to them should only continue to be so employed at trade union rates of wages.

(4) That trade unions should be urged to accept women members in all trades in which they are employed.

(5) That the principle of equal pay for similar duties should be everywhere adopted.

B. With Regard to Civic Rights:—

(1) That all legal restrictions on the entry of women to the professions on the same conditions as men should be abrogated.

(2) That women should have all franchises, and be eligible for election to all public bodies (including Parliament), on the same conditions as men.

(3) That systematic provision should be made for the inclusion of women in committees or commissions, national or local, dealing with any subjects that are not of exclusively masculine interest.

(4) That the present unjust provision of the income tax law, under which the married woman is not treated as an independent human being, even in respect of her own property or earnings, must be at once repealed.

X. THE RESTORATION OF PERSONAL LIBERTY

That this conference regards as fundamental the immediate repeal and abrogation, as soon as the war ends, of the whole system of the military service acts, and of all the provisions of the defense of the realm acts restricting freedom of speech, freedom of publication, freedom of the press, freedom of travel, and freedom of choice of residence or of occupation.

XI. POLITICAL REFORMS

That the conference reaffirms its conviction that no lasting settlement of the question of political reform can be reached without a genuine adoption of

- (a) complete adult suffrage, with not more than three months' residential qualification;
- (b) absolutely equal rights for both sexes;
- (c) effective provision for absent electors to vote and the best practicable arrangements for ensuring that every minority has its proportionate and no more than its proportionate representation;
- (d) the same civic rights for the soldiers and sailor as for the officers;
- (e) shorter Parliaments; and
- (f) the complete abandonment of any attempt to control the people's representatives by a House of Lords.

That the conference especially protests against the defects of the representation of the people act of last year, which failed to give votes to women under thirty years of age, denied them the right to sit in Parliament, maintained for both sexes an unnecessarily long period of residence as a qualification for the register, ignored the rights of the civilian electors who may be compulsorily away from home on polling day, and omitted any provision which would have prevented the scandal of large sections of the voters remaining unrepresented whilst members are returned to Parliament by a minority of the voting constituency.

It protests, moreover, against civil servants being denied the right, which has long been enjoyed by army and navy officers, without at once resigning their appointments, of offering themselves to the electors as Parliamentary candidates.

This conference calls for the abolition of the House of Lords without replacement of any second chamber. The conference further protests against the disenfranchisement of conscientious objectors.

XII. IRELAND

That the conference unhesitatingly recognizes the claim of the people of Ireland to Home Rule, and to self-determination in all exclusively Irish affairs; it protests against the stubborn resistance to a democratic reorganization of Irish government maintained by those who, alike in Ireland and Great Britain, are striving to keep minorities dominant; and it demands that a wide and generous measure of Home Rule should be immediately passed into law and put in operation.

XIII. CONSTITUTIONAL DEVOLUTION

That the conference regards as extremely grave the proved incapacity of the War Cabinet and the House of Commons to get through even the most urgently needed work; it considers that some early devolution from Westminster of both legislation and administration is imperatively called for; it suggests that, along with the grant of Home Rule to Ireland, there should be constituted separate statutory legislative assemblies for Scotland, Wales, and even England, with autonomous administration in matters of local concern; and that the Parliament at Westminster should be retained in the form of a Federal Assembly for the United Kingdom, controlling the ministers responsible for the departments of the Federal government, who would form also, together with ministers representing the dominions and India whenever these can be brought in, the Cabinet for Commonwealth affairs for the Britannic Commonwealth as a whole.

XIV. LOCAL GOVERNMENT

That in order to avoid the evils of centralization and the drawbacks of bureaucracy, the conference suggests that the fullest possible scope should be given, in all branches of social reconstruction, to the democratically elected local governing bodies; that whilst the central government departments should assist with information and grants in aid, the local authorities should be given a free hand to develop their own services, over and above

the prescribed national minimum, in whatever way they choose; that they should be empowered to obtain capital from the government at cost price, and to acquire land cheaply and expeditiously, for any of the functions with which they are entrusted.

The conference holds, moreover, that the municipalities and county councils should not confine themselves to the necessarily costly services of education, sanitation, and police, and the functions to be taken over from the boards of guardians, nor yet rest content with acquiring control of the local water, gas, electricity and tramways, but that they should greatly extend their enterprises in housing and town planning, parks, and public libraries, the provision of music and the organization of popular recreation, and also that they should be empowered to undertake, not only the retailing of coal, but also other services of common utility, particularly the local supply of milk, where this is not already fully and satisfactorily organized by a coöperative society.

Further, that in view of the great and growing importance of local government, this conference thinks it high time that the councilors should again be required to submit themselves for election that, on the first election, at any rate, the whole of each council should vacate their seats and the new council be elected on the principle of proportional representation, and that in order to throw the position open to all persons, rich or poor, all councilors should be provided with payment for any necessary traveling expenses, and for the time spent on the public service.

XV. EDUCATION

That the conference holds that the most important of all the measures of social reconstruction must be a genuine nationalization of education, which shall get rid of all class distinctions and privileges, and bring effectively within the reach, not only of every boy and girl, but also of every adult citizen, all the training, physical, mental and moral, literary, technical, and artistic of which he is capable.

That the conference, whilst appreciating the advances indicated by the proposals of the present minister of education, declares that the Labor Party cannot be satisfied with a system which condemns the great bulk of the children to merely elementary schooling with accommodation and equipment inferior

to that of the secondary schools, in classes too large for efficient instruction, under teachers of whom at least one-third are insufficiently trained; which denies to the great majority of the teachers in the kingdom, whether in elementary or in secondary schools (and notably to most of the women), alike any opportunity for all-round culture, as well as for training in their art, an adequate wage, reasonable prospects of advancement, and suitable superannuation allowances; and which, notwithstanding what is yet done by way of scholarships for exceptional geniuses, still reserves the endowed secondary schools, and even more the universities, for the most part, to the sons and daughters of a small privileged class, whilst contemplating nothing better than eight weeks a year continuation schooling up to 18 for 90 per cent of the youth of the nation.

The conference accordingly asks for a systematic reorganization of the whole educational system, from the nursery school to the university, on the basis of

(a) social equality;

(b) the provision for each age, for child, youth, and adult, of the best and most varied education of which it is capable, and with due regard to its physical welfare and development, but without any form of military training;

(c) the educational institutions, irrespective of social class or wealth, to be planned, equipped, and staffed according to their several functions, up to the same high level for elementary, secondary, or university teaching, with regard solely to the greatest possible educational efficiency, and free maintenance of such a kind as to enable the children to derive the full benefit of the education given; and

(d) the recognition of the teaching profession, without distinction of grade, as one of the most valuable to the community.

XVI. HOUSING

That the conference, noting the fact that the shortage of habitable cottages in the United Kingdom now exceeds one million, and that the rent and mortgages restriction act is due to expire six months after peace, regards a national campaign of cottage building at the public expense, in town and country alike, as the most urgent of social requirements.

That the attention of the government be called to the fact that, unless steps are taken to insist that the local authorities acquire the necessary sites, prepare schemes, plans, and specifications, and obtain all required sanctions, actually before the war ends there is very little chance of the half-a-million new

cottages urgently needed in England, Scotland, Ireland, and Wales during the very first year of demobilization being ready for occupation within that time.

That it is essential that the "Million Cottages of the Great Peace," to be erected during the first two or three years after the war ends by the local authorities, with capital supplied by the national government, free of interest, and a grant-in-aid in one or other form at least sufficient to prevent the schemes involving any charge on the rates, should be worthy to serve as models to other builders; and must accordingly be, not only designed with some regard to appearance, not identical throughout the land, but adapted to local circumstances, and soundly constructed, spacious, and healthy; including four or five rooms, larder, scullery, cupboards, and fitted bath but also suitably grouped not more than ten or twelve to the acre; and provided with sufficient garden ground.

XVII. THE ABOLITION OF THE POOR LAW AND THE DEVELOPMENT OF THE MUNICIPAL HEALTH SERVICE

That the conference notes with satisfaction the decision of the government both to establish a Ministry of Health and to abolish the whole system and organization of the poor law.

It regards the immediate reorganization, in town and country alike, of the public provision for the prevention and treatment of disease, and the care of the orphans, the infirm, the incapacitated, and the aged needing institutional care, as an indispensable basis of any sound social reconstruction.

It calls for the prompt carrying out of the government's declared intention of abolishing, not merely the boards of guardians, but also the hated workhouse and the poor law itself, and the merging of the work heretofore done for the destitute as paupers in that performed by the directly elected county, borough, and district councils for the citizens as such, without either the stigma of pauperism or the hampering limitations of the poor law system.

It feels that only in connection with such a reorganization of the local health services—urgently required to meet the dangers attendant on demobilization—can a Ministry of Health be of effective advantage to the nation.

XVIII. TEMPERANCE REFORM

That the conference records its sense of the great social evil and national waste caused by the excessive consumption of alcoholic liquors, and by the unfortunate intemperance of a relatively small section of the population; that the conference sees the key to temperance reform in taking the entire manufacture and retailing of alcoholic drink out of the hands of those who find profit in promoting the utmost possible consumption; and the conference holds that in conjunction with any expropriation of the private interests the electors of each locality should be enabled to decide, as they may see fit:

- (a) to prohibit the sale of alcoholic drink within their own boundaries.
- (b) to reduce the number of places of sale, and to regulate the conditions of sale;
- (c) to determine, within the fundamental conditions prescribed by statute, the manner in which the public places of refreshment and social intercourse in their own districts should be organized and controlled.

XIX. RAILWAYS AND CANALS

That the conference insists on the retention in public hands of the railways and canals, and on the expropriation of the present stockholders on equitable terms, in order to permit of the organization, in conjunction with the harbors and docks, and the posts and telegraphs, of a united national public service of communications and transport, to be worked, unhampered by any private interest (and with a steadily increasing participation of the organized workers in the management, both central and local) exclusively for the common good.

The conference places on record that if any government shall be so misguided as to propose, when peace comes, to hand the railways back to the shareholders, or should show itself so spendthrift of the nation's property as to give the companies any enlarged franchise by presenting them with the economics of unification or the profits of increased railway rates, or so extravagant as to bestow public funds on the reëquipment of privately-owned lines, the Labor Party will offer any such project its most strenuous opposition.

XX. THE NEW ELECTRICITY SUPPLY

With regard to the generation of electricity for the provision, both for the factory and the home, of the cheapest possible power.

light and heat, the conference declares that the Labor Party stands for the provision, by the government itself, of the score of gigantic super-power stations by which the whole kingdom could be supplied, and for the linking up of the present municipal and joint stock services for distribution to factories and dwelling-houses at the lowest possible rates.

The conference notifies that the Labor Party will offer the most strenuous opposition to this great national service being entrusted, on any terms whatsoever, to private capitalism.

XXI. COAL AND IRON MINES

That the conference urges that the coal mines, now under government control, should not be handed back to their capitalist proprietors, but that the measure of nationalization, which became imperative during the war, should be completed, at the earliest possible moment, by the expropriation on equitable terms of all private interests in the extraction and distribution of the nation's coal (together with iron ore and other minerals).

The conference asks that the supply of these minerals should henceforth be conducted as a public service (with a steadily increasing participation in the management, both central and local, of the workers concerned), for the cheapest and most regular supply to industry of its chief source of power, the retail distribution of household coal, at a fixed price, summer and winter alike, and identical at all railway stations throughout the kingdom, being undertaken by the elected municipal district, or county council for the common good.

XXII. LIFE ASSURANCE

That the conference declares that, partly as a means of affording increased security to the tens of thousands of policyholders whose bonuses are imperilled by capital depreciation and war risks, and partly in order to free the nation from the burdensome and costly system of the industrial insurance companies, the state should take over (with equitable compensation to all interests affected) the whole function of life assurance, giving in place of the present onerous industrial insurance policies a universal funeral benefit free of charge; putting the whole class of insurance agents in the position of civil servants administering the state

insurance business; developing to the utmost the beneficial work of the friendly societies in independence and security, and organizing, in conjunction with these societies, on the most approved principles, a safe and remunerative investment of popular savings.

XXIII. AGRICULTURE AND RURAL LIFE

(1) That the conference regards the present arrangements for the production and distribution of food in this country, and the life to which many thousands of country dwellers are condemned, as nothing short of a national disgrace, and as needing to be radically altered without delay.

(2) That it is essential that the government should resume control of the nation's agricultural land, and ensure its utilization not for rent, not for game, not for the social amenity of a small social class, not even for obtaining the largest percentage on the capital employed, but solely with a view to the production of the largest possible proportion of the foodstuffs required by the population of these islands under conditions allowing of a good life to the rural population and at a price not exceeding that for which foodstuffs can be brought from other lands.

(3) That this end can probably best be attained by a combination of

- (a) government farms, administered on a large scale, with the utmost use of machinery;
- (b) small holdings made accessible to practical agriculturists;
- (c) municipal enterprises in agriculture, in conjunction with municipal institutions of various kinds, milk depots, sewage works, etc.;
- (d) farms let to coöperative societies and other tenants, under covenants requiring the kind of cultivation desired.

(4) That under all systems the agricultural laborer must be secured a healthy and commodious cottage, with sufficient garden ground, the opportunity of getting an accessible allotment, and, when he so desires, a small holding, together with a wage continuously adequate for the requirements of body and mind.

(5) That the conference suggests that the distribution of foodstuffs in the towns—from milk and meat to bread and vegetables—should, with equitable compensation for all interests expropriated and persons displaced, be taken out of the hands of the present multiplicity of dealers and shopkeepers, and organized by consumers, coöperative societies, and the local authorities working in conjunction.

XXIV. CONTROL OF CAPITALIST INDUSTRY

That the conference insists, especially in view of the rapid development of amalgamations and trusts, on the necessity of retaining after the war, and of developing the present system of organizing, controlling, and auditing the processes, profits, and prices of capitalist industry; that the economies of centralized purchasing of raw materials, foodstuffs, and other imports must be continued, and, therefore, the "rationing" of all establishments under a collective control; that the publicity of processes thus obtained has a valuable effect in bringing inefficient firms up to a higher level; that the "costing" of manufacturers' processes and auditing of their accounts, so as to discover the necessary cost of production, together with the authoritative limitation of prices at the factory, the wholesale warehouse and the retail shop, affords, in industries not nationalized, the only security against the extortion of profiteering; and that it is as much the duty of the government to protect the consumer by limiting prices as it is to protect the factory operative from unhealthy conditions, or the householder from the burglar.

XXV. NATIONAL FINANCE

1. That in view of the enormous debts contracted during the war, and of the necessity to lighten national financial burdens, this conference demands that an equitable system of conscription of accumulated wealth should be put into operation forthwith, with exemption for fortunes below £1,000, and a graduated scale of rates for larger totals, believing that no system of taxation only of income or profits will yield enough to free the country from oppressive debts, and that any attempt to tax food or the other necessities of life would be unjust and ruinous to the masses of the people.

2. That the only solution of the difficulties that have arisen is a system by which the necessary national income shall be derived mainly from direct taxation alike of land and accumulated wealth, and of income and profits, together with suitable imposts upon luxuries, and that the death duties and the taxation upon unearned incomes should be substantially increased and equitably regarded.

3. That the whole system of land taxation should be revised so that by the direct taxation of the unearned increment of land values effect should be given to the fact that the land of the nation, which has been defended by the lives and sufferings of its people, shall belong to the nation, and be used for the nation's benefit.

4. That this conference emphatically protests against the subjection of coöperative dividends to the excess profits tax and against the repeated attempts to bring coöperative dividends within the scope of the income tax.

5. That as during the war the government has had to come to the assistance of the banking institutions of the country, and that it has been found necessary to pay very high rates for the money raised, adding considerably to the annual burden resulting from the war, whilst the banks are now pursuing a policy of fusion such as brings them near to the position of a monopoly, the Post Office Savings Bank should be developed into a national banking system for the common service of the whole community.

XXVI. THE NEED FOR A "PEACE BOOK"

That in the opinion of this conference the problem of the social and industrial reconstruction of Great Britain after the war is of such grave importance and of such vital urgency, that it is imperative, in order to avoid confusion in the period of demobilization, that the main outlines of policy in all branches should be definitely formulated, upon the responsibility of the minister of reconstruction, before the war ends, so that they can be published in a Peace Book for public criticism before being finally adopted by the Cabinet, for the authoritative guidance of all ministers and heads of departments.

XXVII. "LABOR AND THE NEW SOCIAL ORDER"

That the draft report on reconstruction, entitled Labor and the New Social Order, be revised after consideration of all the amendments suggested, and in accordance with the decisions of the conference, and that every constituent organization be asked to report within four weeks how many copies it proposes to order for distribution to its branches and members.

BOOK REVIEWS

BARKER, J. ELLIS. *The Great Problems of British Statesmanship*. Pp. 443. Price, \$3.60. New York: E. P. Dutton & Co., 1917.

This book by J. Ellis Barker, author of "Modern Germany," "Great and Greater Britain," "The Foundations of Germany," presents concisely the historical facts back of the problems of British statesmanship with special reference to Constantinople, Asiatic-Turkey, Austria-Hungary, Poland, Anglo-American relationships and industrial and financial problems. Particularly on international matters, the book is informing and of intense interest and value to all those who wish to have available pertinent facts as to the historical background of the present war and the international problems growing out of that war.

C. L. K.

COMMONS, JOHN R., ET AL. *History of Labour in the United States*. Vol. I, pp. xxv, 625. Vol. II, pp. xx, 620. Price, \$6.50. New York: The Macmillan Co., 1918.

This work forms the fourth of a series designed to include a divisional history from each of the twelve divisions composing the department of economics and sociology of the Carnegie Institution of Washington, D. C., according to a general plan for studying the economic history of the United States. The introductory note by Professor Henry W. Farnam explains the plan of the series and gives a list of the books already published. The collaborators have now reorganised as the Board of Research Associates in American Economic History and expect to publish additional volumes from time to time.

The present work has been written in collaboration by six different authors and deals mainly with the history of labor conditions, of labor philosophies, and of labor movements—not primarily with the structure or policies of labor unions, nor with the history of individual unions, nor with the legislative results of movements, nor with current problems;—the field treated is rather the background which explains structure, policies, results and problems. Professor John R. Commons, under whose direction the various studies were made, outlines in a single chapter the interaction of economic and political conditions with the many varieties of individualistic, socialistic, and protectionist philosophies which have made the American labor movement what it is.

The various parts and their authors are as follows: Colonial and Federal Beginnings, David J. Saposs; Citizenship, Helen L. Sumner; Trade Unionism, Edward B. Mittelman; Humanitarianism, Henry E. Hoagland; Nationalisation, John B. Andrews; Upheaval and Reorganisation, Selig Perlman. The first four studies treat of the labor movement down to 1860, while the last two bring it down to the present time. The various studies are of uneven merit and the work leaves the impression of the need of bringing its various parts into a complete and homogeneous whole.

Only a single chapter is given to developments since 1896 and this is a mere sketch. The bibliography given is limited for such a work and is lacking in several cases where completeness is claimed. The work likewise leaves no sense of mastery of the subject as do such works as *Industrial Democracy* and the *History of Trade Unionism* by the Webbs. In spite of these criticisms, however, the work is a distinct contribution to the literature of the labor movement; it brings together for the first time a vast amount of information invaluable to all interested in social development and should furnish a point of departure and an incentive for further studies.

GEORGE M. JAMES.

University of North Dakota.

COOKE, MORRIS L. *Our Cities Awake*. Pp. xi, 331. Price, \$2.50. New York: Doubleday Page & Co., 1918.

That a book on *Our Cities Awake* could come out of the experience of one who was for four years the Director of the Department of Public Works in the City of Philadelphia is the best proof that the title of the work reflects at once a fact in American urban life and a buoyancy of optimistic purpose that assures great achievements in the reconstruction days now upon us. The vigor of our growing cities appeals to and is truly reflected by the mental vigor with which the author pictures the solutions which can be and have been adopted for civic, social and industrial problems by the maturing cities of a young nation.

This book is not a factual book, but it is a record of inspiring facts. It is the output of one, who, having drudged in the basement of city hall facts, goes to the towers for refreshment and broader views; it is the work of an efficient engineer with a public philosophy. It is not by chance that the introduction is from the pen of a pacifist mayor who as Secretary of War helped mightily to win a world war for democracy. The retinue of visionful workers this book will enlist is the one sure token that our cities now awake will not relapse into the slumber of civic indifference.

The book is one for the high school, for the teacher and for the business man as well as for the civic preacher. Like good stories for children, the book will be enjoyed by grown-ups, who want to sense the charm and interest in urban facts whether they have to do with sewers, city hall pigeons, civil service or publicity.

CLYDE L. KING.

University of Pennsylvania.

MOORE, H. L. *Forecasting the Yield and Price of Cotton*. Pp. vi, 173. Price, \$2.50. New York: The Macmillan Co., 1917.

Again Professor Moore has investigated the law of economic change by the criteria of the higher statistical methods. In this case his task is to forecast the price of cotton, a commodity upon which alone practically depends the welfare of the entire southern group of states. He finds that it is possible by the use of the correlation formula to predict the yield per acre of cotton from current records of temperature and rainfall with greater accuracy than is now attained by the method in use by the Bureau of Statistics of the Department of Agriculture, and sometimes as much as two months in advance of the latter; he finds that the probable acreage can be forecast before the cotton crop is planted, with substantially the same degree of accuracy with which the Bureau of Statistics forecasts the yield per acre at the first of September; and finally he establishes the law of demand for cotton by the theory of multiple correlation. It is a very interesting and very suggestive piece of work.

He devotes a long chapter in the early part of the book to the derivation of the correlation coefficient and the regression equations—apparently with the purpose of making his methods understandable and usable by business men. Nevertheless the technique is difficult for anyone not trained in statistical methods and it will probably be some time before the method of correlation is used extensively. This detracts in no way from the credit of making a start.

It is unfortunate that statisticians cannot agree on a uniform system of notation in deriving and using correlation formulae. The notation followed in Yule's text is probably most common. Professor Moore reverses this usage in one respect by representing actual measurements by x and y while deviations from the mean are expressed by the capitals X and Y . This may not be a serious fault, yet it is confusing to the very readers whom he apparently wishes to reach, for the next exposition of correlation they read will as likely use the opposite notation.

BRUCE D. McDONETT.

University of Washington.

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INDUSTRIES IN READJUSTMENT

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FOREWORD

Industries are always in a state of readjustment. The changing ratio in demand and supply, the development of new commodities and of new markets, the effects of a changing purchasing power of money, progress in marketing and retailing and the opening or closing of marketing channels;—these and other forces in normal times force readjustments in and by industries. The rapidity of those adjustments and the risk involved in them are greater just now, and hence the topic is of peculiar importance. Of special interest is the work of readjustment going on in the United Kingdom as typical of the more difficult reconstruction problems of those countries longer at war than was the United States. (Part I.)

For years many social and economic forces have been at work to cause a readjustment in the relations between capital and labor by creating new social standards as to what purchasing power constitutes a fair living wage and a fair opportunity for the expression of all the normal human instincts. The securing of these standards involves a new bargaining relationship between labor and capital. (Part II.)

The world in ideals and in facilities for communication is now more nearly a unit than were the colonies at the time of the adoption of the American constitution. In the days of the cable and the wireless, international business coöperation becomes as vital as was national business coöperation to the United States but little over a century ago. To meet both national and international needs there must be that new relationship between governments and business by which the industrial equipment can find its maximum output at minimum cost. The spirit of Anglo-Saxon industrial institutions is to preserve the usefulness of competition. The plane on which competition shall take place has been constantly elevated by social concepts of justice. With the change in the plane of competition has come a change in its form, and hence in the real tests of what constitutes fair competition and what is an unreasonable restraint of trade. The competitive unit is broadening beyond nations, even to include the

zones of climate, the favorable locations of continents, and racial standards and ideals. This readjustment in the form and field of competition is accompanied by a movement to fit form of government to the changes in industrial functions by giving to administrative bodies wider discretionary powers over competition and restraint of trade, in lieu of leaving this function to the hardened common and statutory law as enforced in the courts. (Part III.)

The standardization of weights and measures as a prerequisite to the free flow of goods between markets has been recognized as to certain types of weights and measures. But in that class of goods most vital to human welfare—foods—much remains to be done. Internationalizing commerce brings new needs for other standards, such as standardization of motors and machine parts. In this new field of standardization lie the possibilities of a free flow of commodities from one world market to another. Such standardization opens to industries possibilities almost as large and as revolutionary as those opened up by machinery. The same commercial needs that placed in our national constitution a provision for nationalizing weights and measures for interstate commerce now necessitates world-wide standards to keep international commerce mobile. For this new type of industrial standardization the British have a fairly well developed program. The American program is in the making. (Part IV.)

The normality of industrial readjustment and the character and rapidity of industrial readjustment depends upon the industrial and financial outlook. To foresee the future is more difficult and less certain than recounting the past. But every worker and every business man must be a prophet; or be guided by prophets. For it is the business outlook that shapes the business present. (Part V.)

CLYDE L. KING.

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Industries in Readjustment

By ERNEST T. TRIGO

President, Philadelphia Chamber of Commerce

THE cessation of hostilities in the great European war found this nation as unprepared for peace as it was for war. When the armistice was signed, American industry was reaching that condition where production was beginning to meet the demands of the nation for war supplies. Industry had responded efficiently, promptly, and with a wonderful spirit of devotion to the nation's interest, to the demands which the army and the navy made upon it for war supplies. The various governmental agencies established for the purpose of accelerating military industry found the great industrial establishments as well as the smaller producing units eager to help, willing and anxious to make all necessary adjustments to further the war program.

INDUSTRIAL ECONOMY A WAR ADJUSTMENT

Like the changes which the war brought in the life of much of the nation's citizenry, the changes which war brought to industry were revolutionary. The adjustments were dictated by the call to produce war supplies in quantities unheard of before, to produce manufactured products strange and new. So necessary and so insistent was the nation's demand, that every manufacturing plant in the United States, no matter what its product, though only remotely related to war material, had to heed the call to produce war material or materials of public necessity or go out of business.

New industrial establishments were organized and existing plants were expanded. Vast armies of workers were recruited, taken from their everyday pursuits into new and untried occupations. Wages were abnormally high on account of the abnormal demand for labor. The entire industrial labor fabric was changed. Men whose pre-war occupations had been unskilled or semi-skilled had to be rapidly trained into the highest type of skilled mechanics. The demand for labor, together with the demand of the nation for fighting men made necessary the placing of women in industry in places heretofore exclusively occupied by men.

All industry, war as well as that not exclusively producing war materials, had to adjust its processes and its output to meet the ever increasing shortage of raw materials caused by the extraordinary wastage in war consumption, the inability to import because of the urgent need of shipping for the movement of troops and war supplies, and the general shortage of available domestic transportation facilities. To intelligently direct such adjustments, and make such rules as would cause the least inconvenience to business, the government through the War Industries Board consulted with the manufacturing establishments concerned and obtained their views as to methods of economies in consumption of raw materials before establishing regulations. In many cases where the problems were complex, men standing high in the particular industry were drafted to the service of the government for the purpose of administering the problems connected with their own business. The shortage of labor also compelled many policies of economy in manufacture.

Interesting as showing the trend of industrial economy are some of the regulations made by the War Industries Board which tended to conservation of materials in which there was a shortage, and a general saving in manufacturing processes. The rule that advertising literature should be largely restricted and that publications should be reduced in size effected large economies in the use of paper of which there was a very limited supply. Reducing the number of styles of metal beds and limiting the amount of embellishments thereon effected large economies in the use of steel and brass. Limiting the number of styles of various kinds of agricultural implements effected large economies in use of metals, wood and labor which could be profitably used for military purposes. Limiting the number of package sizes of goods put up in containers permitted the transfer of large amounts of raw materials to important military uses.

An important indirect effect of the economies through the regulations of the War Industries Board was the resultant saving in investment caused by the carrying of smaller stocks by the jobbers and the retailers who were not compelled as heretofore to carry stocks of large numbers of kinds and sizes. The capital so released was largely used for investment in the government's war securities, and so became an effective help in the war program.

THE CHANGE TO PEACE PRODUCTION

November 11, 1918, found the whole industrial war program just reaching its peak-load of productive effort. The whole country was adjusted to its work. Citizens were being converted into fighting men, in large numbers; industry was furnishing the materials needed for the war in quantities satisfactory for the supply of the armies in the field. The factories, the commerce of the nation, were organized for the one big job most effectively and most efficiently, when suddenly came the end of hostilities. The tremendous wastages of materials in the prosecution of the war suddenly ceased, and the nation's industrial fabric was called upon to adjust itself to a peace basis. The vast industrial establishments exclusively producing war materials were faced with the necessity of finding other products which they could manufacture or of dismantling the factories. The change to peace production had to be made quickly because labor had to be taken care of in other than war-time pursuits. Every consideration forbade the permitting of unemployment. Economic conditions made it impossible to immediately reduce the wage scale. Labor had adjusted itself to a high wage scale. Its living standards had been raised, food and other supplies were high, making impossible a reduction in labor's budget. Confronted with the paradox on the one side of a large demand for employment by workers which under ordinary conditions would have brought about a reduction in the labor wage scale, and on the other hand with the necessity of keeping the scale high to prevent serious economic and political disturbances, industry had to face its task of adjusting to peacetime work.

In casting about for markets for its goods, industry found them very much restricted due to the buying inability of nations who had become impoverished through the war. Here also industry must feel the pressure of competition from these same countries who are the large manufacturing countries of Europe. This competition will come not only in its own markets but also in the markets of the world. The European nations have become through the war debtor nations. They are confronted with the driving necessity of exchanging raw materials and manufactured products for gold. Their soldiers returning from the war must be provided

with work, and the starting up of manufacture on a huge scale becomes imperative in Belgium, England, France and Germany.

It is now America's problem to maintain itself as a successful competitor in the sale of manufactured products in the markets of the world, and to provide the millions of war workers and returning soldiers with work. Some shifting of labor will have to be made. Every economic consideration forbids the retaining in the factories of workers who had been drafted for war work from the farms. These must be returned to do their part in meeting the large shortage in the world's food supply caused by the war. Large building projects and public works should be undertaken to take care of labor which cannot be used on farm and in factory.

Industry itself can only survive the strong competition which she is bound to encounter from abroad by increased efficiency. The costs of manufacturing processes must be reduced by doing better, quicker and cheaper the things which are necessary to produce its goods. Every economy in transportation, in making and selling goods must be taken advantage of. Transportation problems, selling campaigns and manufacturing efficiency must be looked at not from a selfish and local angle but must be studied from the broad vision of an international viewpoint. Foreign markets must be established and held in order to keep the nation's flag flying at the masts of American owned and American manned ships, and to provide an outlet for the surplus products which America must of necessity produce.

ECONOMY A PEACE AS WELL AS A WAR AIM

The mobilization for war was successful. Why then should not a mobilization for peace be made along the lines which the war experience has taught are efficient? The war showed the necessity for the exercise of every economy, and this should be the aim in peace times. Intelligent coöperation should exist among those engaged in similar industries to prevent the doing of things through motives of competition which are extravagant and wasteful and benefit no one. The good work of the War Industries Board which pointed out the way for the elimination of useless styles and sizes in manufactured products should be perpetuated and extended to many industries which were not covered during the war. Cheapening of transportation should be effected through

the elimination of duplication, and intelligent distribution. Intelligent thought should be given to the development of cheaper methods of transportation by use of connected waterways, either natural or artificial, but their establishment should be considered from the viewpoint of the nation as a whole and not from selfish and local considerations. Business must receive a larger share of the attention of the government. It must be recognized as an important factor in the well-being of the nation. But this is not intended to suggest government control, or government ownership of any of the agencies of business. Monopolies are not necessary and competitive conditions should be maintained, and the greatest care should be taken that the trend is not toward paternalism. Capital and labor should recognize their identity in interest, and should so conduct their mutual work that the best results may be obtained from all concerned. Labor troubles, whether strikes or lockouts, are wasteful, and where they occur reduce the nation's capacity and efficiency to successfully compete in its bid for the trade of the world.

How can these things be brought about? During the war, industry found that it could solve its new problems itself, for the War Industries Board was an agency representing industry and its personnel was made up of the industrial leaders of the nation. Why then should not industry do so now? Let industrial effort be directed by the coöperative endeavor of men chosen from its own ranks who will consider the problems from a general and national viewpoint. Let these men amplify and continue the work so effectively done by the war service committees of the various industries organized under the supervision of the Chamber of Commerce of the United States of America.

These organizations should form a point of contact with the various governmental agencies either remotely or directly concerned with industrial processes. They should have a voice in the laying out of plans for governmental activities affecting industry, whether national, state or civic, and their influence should be against the spending of public funds for objects not regarded as helpful to industry in a national sense. They should be in a position to suggest that government aid be in a direction which is supplemental to the work they themselves might undertake, and should insist at all times that there be the closest co-

operation between the government and industry, whether affecting the processes of transportation, the production of raw materials and manufactured products, or concerning labor.

The nation's industries must realize that successful competition in the world's markets today cannot result from efforts that are individualistic, but only from the closest harmony and coöperation, first in industry itself and then between industry and the government.

Food in the Reconstruction Period

By J. S. CRUTCHFIELD

Vice-Administrator, United States Food Administration for Pennsylvania

IF food played a vital part in winning the war it occupies relatively an even more important place in bringing about tranquility during the armistice and in the period of reconstruction. The drastic food regulations imposed upon our country shortly after our entering the war were cheerfully accepted on the assurance of Mr. Hoover and the President that the regulations were a matter of a military necessity.

The effectiveness and success of the Food Administration was largely due to the fact that it reached every man, woman and child in the nation, as well as the men, women and children of the Allies and those of the neutral countries dependent upon us. The stimulation of industry and business in the United States so greatly increased the purchasing power of our people that if they had been so inclined they could easily have consumed and paid for a large portion of the food that we exported as well as that which was used. The stabilization of food prices by the enforcement of the law requiring middle men to sell all food products at cost plus a pre-war profit, without regard to market or replacement value, would also have encouraged an abnormally large consumption were it not for the conservation regulations voluntarily observed by the rank and file of our people. The habit of the general public in adapting their diet to those foods which the market afforded, as compared with what they ordinarily demanded, played a large part in bringing about the desired results.

REDUCED INCOMES AND FOOD PRICES

In this period of reconstruction the average income of our workers is materially reduced and advantage must be taken of the habits, acquired of necessity during the war, of substituting the use of those foods which are abundant and relatively cheap in price for those foodstuffs which under normal conditions we have been accustomed to demand. In the exigencies of the present situation there is an urgent demand for statutory regulations

that will afford relief. The people on the one hand wish to be freed from the onerous regulations and exactions of the war food laws in the matter of what they shall and what they shall not eat, and on the other hand be protected against high prices and profiteering.

We are confronted with a condition and not a theory; substantial relief will not come to the public by the enacting of new laws against profiteering. The unalterable law of supply and demand will determine the price of food. Herbert Hoover did not, as some suppose, suspend the law of supply and demand. He persuaded the public to stop *demanding* certain foods in the usual quantities, in consideration of which he was able to furnish what food was actually *needed* at a stabilized and comparatively reasonable price.

The law regulating the profits of middle men without being accompanied concurrently by a voluntary general conservation in the use of food on the part of the public would not tend to lower or stabilize the price to the consumer. Any profits that such a law would keep back from the middle man would automatically go to the producer. This is an indisputable and well-established fact, although difficult to comprehend on the part of many of our best economists. It is a fact which must be recognized immediately not only by the public but by Congress, if the real solution of the present difficulties is to be found and made effective.

The solution of the problem of a decreased income and sustained high prices on many foodstuffs is found in the general adoption of the same habits of substitution and conservation in the use of foodstuffs as were practiced of necessity during the war. He that controlleth his own appetite and adapteth his taste to what the market affords is greater than he that deviseth many laws against profiteering. In other words, this which the public is looking to the law makers to supply them with in the form of protection against exorbitant food prices lies within their own control. Necessity is the mother of invention. Misfortunes and even calamities are frequently blessings in disguise. It would indeed be unfortunate if the valuable lessons in diet and in marketing, which we were just beginning to learn, were not driven home by a continued application during this period of readjustment.

The grossest ignorance exists in this country as to the relative

values of our large variety of foodstuffs. There are scores of different kinds of foodstuffs which can be produced at one-third to one-half the cost of production of the kinds of food which we have customarily consumed. True, it will require perhaps greater culinary skill to prepare these foods acceptably, but it is all within easy reach of accomplishment. Could the public believe this possible by making habitual and general those simple conservation measures which amounted to enough during the war to feed one hundred and twenty millions of our Allies without creating any undue hardship on our own people, they would seek some agency that would direct and lead to such a movement.

The officials of the United States Food Administration in connection with the United States Department of Agriculture, Office of Markets, have formulated a system of publicity which will inform and educate the public to a certain degree, particularly on perishable foodstuffs. Much more needs to be done in the matter of information and education in the more staple lines. This would afford a splendid activity for those organized agencies which developed such a high state of efficiency in contributing to the winning of the war.

There is conspicuous absence of common sense and reasoning in the consideration of the food problems. It is difficult, though perhaps necessary, to make provision for that considerable portion of our people who live one day at a time. No measure has been discovered to assist them,—indeed it may be undesirable to afford permanent help to those people who will not help themselves. There is almost universal complaint on the part of the consumer because of the apparent profiteering on the part of the producer, and a lack of understanding as to why the producer's prices are not regulated. The average family should not be so much interested in the cost of living this week or this month as they are in the average cost of living during the next twelve months, or in fact, as they are in the average cost of living during the entire reconstruction period of several years' duration.

BRINGING DOWN THE COST OF LIVING

Once again let me emphasize the indisputable fact that there are only two ways of bringing down the cost of living. First, by increasing the supply which is accomplished by paying the producer an attractive price for his product. Within a reasonable

time this invariably results in greatly increased production (except for providential interference). Second, by the economical use and wise choice of the kinds of foods consumed—in other words, the voluntary regulation of the demand. These two factors, an increasing supply on the one hand, and a decreasing or well controlled demand on the other hand, will give an average cost of foodstuffs which must be most satisfactory and gratifying.

To expect the food supply and prices to remain on an even level during these abnormal reconstruction days when the whole world is looking to the American market for an undue share of our supplies, would be to expect conditions that obtain in no other department of life. Hence the importance of acquiring the habit of adapting oneself to the supplies in the market and of accepting some of the ups and downs of prices in the cost of living. We must recognize that of a necessity some periods of weeks or months naturally will favor the producer. This will be a period of high prices, which in turn will stimulate increased production. Other periods of low prices, of corresponding length, will favor the consumer and have a tendency to decrease production.

The Food Administration in conjunction with the federal and state departments have also formulated and encouraged the passing of laws which will regulate to a reasonable degree the distributors of foodstuffs. Among other things it is proposed that many classes of middle men shall be re-licensed, particularly commission merchants and the packers. The National League of Commission Merchants at their annual convention in January at Boston adopted resolutions favoring the licensing of the commission business in fruits and vegetables. This will tend to eliminate the tricky and dishonest factors in the business which alike is a protection to the public and to the legitimate members of the trade.

In considering these vital food matters I have purposely refrained from referring to the larger and more unselfish question of conservation and the habits of eating which will best enable us to succor a famine-stricken Europe. It is obvious that what will serve our own economic needs in the matter of controlling the cost of living at home will most effectually aid those millions of stricken humanity in the war-devastated regions of Europe, many millions of whom it must be remembered are suffering terribly from wounds and disease directly due to the war.

Readjustments in the Retail Grocery Business

By A. B. Ross

Market Expert, Pennsylvania Council of National Defense

WITH the formation of the United States Food Administration, it was generally believed that a general reform of the methods of distributing food would ensue. The wish was father to the thought. But the very things which the Food Administration had to do made reform impossible. It was necessary to secure the full coöperation of the wholesale and retail distributors in every step undertaken; and that could not have been done had the Food Administration sought to force reforms in their methods. The best that could be hoped for was that excessive profiteering would be prevented; and this task the Food Administration accomplished splendidly. Even in the fixing of fair prices, however, allowances had to be made sufficiently broad to protect the inept and shiftless distributors, so as to keep the whole machinery in smooth operation for the great purpose in view.

And so we find ourselves, at the dissolution of the Food Administration, with the problems of distribution just where they were before; rather worse, if anything, because of the precedents set in the matter of "fair prices" and the abandonment of free delivery service. Nevertheless the problem of the ever rising cost of food is one which will not down, and its solution one of those which must be found during the period of reconstruction. The world has a debt of \$200,000,000,000 to liquidate. All business is seeking methods which will eliminate waste. And those practices in the distribution of food which cost money yet make no one a profit must be gotten rid of.

The most important raw material which enters into manufacture is the food of the laborer. Nearly half of his wages go for the purchase of food. The bill for inferior food and for food which costs more than it should is handed to the manufacturer for liquidation. The problem roots too deeply to be neglected by our business interests.

EXCESSIVE COST OF BLIND COMPETITION

There are 375,000 retail grocers in the United States, one for every 293 people. In the larger cities this over-development is greater, and there is a grocer for every forty to fifty families. These small groups of families pay for the rent, light, heat, delivery service, losses from bad debts,—for all the usual expenses of running the business,—and furnish a living for the grocer and his family and a profit on his invested capital.

The high cost of food is largely connected with the smallness of these units and their relatively high operating expense. Theoretically, with four or five grocers in the field for every one who could operate economically, competition should promptly bring down prices and eliminate the unfit units. But such is not the case. Faced with the choice of developing a small business at a high margin of profit—of protecting his living in what seems to be a sure way—and the bolder course of going after business by underselling competitors and absorbing their trade, the grocer has chosen the former method. In so doing, he has been compelled to develop competition along new and wholly vicious lines. This competition has taken the form of “free delivery,” loose credits, telephone service, soliciting orders, and other practices, all of which add to the cost of doing business and force an ever-rising margin of gross profit to protect the business. Until within recent years, the retail grocer met all his risks, losses and troubles by charging enough to take care of all such items. The consumer paid for all business mistakes. These were the golden days of the business, largely responsible for the development of the great excess of units therein.

But in the country districts, the mail order houses capitalized the opportunity for taking away the grocer's trade; and in the cities, the chain store entered the field. Both were highly successful; and their success is growing. Yet neither have found even an approximate solution of the consumer's problem, the ways of business being those of unenlightened selfishness.

ANALYSIS OF COSTS OF COMPETITION

The adoption of the “credit” system has been an unqualified curse. The average grocer has neither liquid capital enough nor bank credit to finance his buying operations. He has no license

to assume the functions of a free bank with his customers. When the customer—who has been actively demanding that her dollar be accorded its full purchasing power—accepts credit at the hands of the grocer, it is precisely the same as if she borrowed a dollar of the grocer's working capital to spend in his store. By this operation she destroys the cash purchasing power of her own and her grocer's dollar. Neither gets action at the right time.

It is not in the losses from bad debts, the bookkeeping cost, the billing and collecting that credit exercises its most baleful effect. The grocer with ready cash can buy, on an average, 10 per cent cheaper in the open market than his rival who is in the limited credit class; and this opportunity is absolutely destroyed by the credit system, except in those rare cases in which the grocer has ample funds for his business opportunities. The grocer who extends credit not only becomes a "credit buyer," but a buyer of the most undesirable class, a hand-to-mouth buyer who requires constant calls on the part of salesman and collector, constant small deliveries, a great detail of bookkeeping and close watching by the credit department of the wholesaler. He is the poorest buyer in the whole list—and his customers pay the Scot, for the bill for all this riot of inefficiency is included in the price charged the grocer by the wholesaler.

The backbone of the retail grocery business is the cash buyer. The grocer who extends credit must charge higher prices than the cash grocer. It is true that he gets business by using credit; but it is equally true that he gets undesirable business and drives away his best customers. He trades the substance for the shadow. That credit is not necessary is sufficiently proven by the great success of the mail order houses, the chain stores and the independent grocers who have changed to a cash basis.

"Free delivery," except in the case of those stores which handle an "exclusive" trade and can therefore charge high prices, is without any standing in the court of economics of the reconstruction period. It is ridden to death practically without exception.

The net profits of the grocery business are small. Four per cent on the total business is regarded as a very satisfactory profit. It is high for a business which is actively seeking extension. Even were it possible for the efficient store to hold its delivery cost to the 3 per cent found by Harvard as "efficient" for delivery cost,

this would require a charge of (4 per cent plus 3 per cent) 7 per cent of the total business to cover delivery cost and net profit, a serious and unnecessary handicap for an actively competitive business. Were the expense of the delivery (as above) charged against the goods delivered, a business in which half of the goods were delivered and half carried home by customers would yield $87\frac{1}{2}$ per cent of its *net* profit from the "carry" trade and but $12\frac{1}{2}$ per cent from the delivery trade. In the *average* store, the charging of "free delivery" cost against goods delivered invariably shows that the delivery system is an intolerable burden on the profits of the business; never a contributor, always a thief. A five-cent charge for delivery, in all but exceptional cases, becomes almost instantly, through its direct and indirect effects, a source of income and saving sufficient to make the delivery system self-sustaining, so that the goods delivered yield their just share of the net profits of the business. And this small charge is not resented by the customer provided a reduction in price of some of the merchandise is made so as to refund to the customers the allowance in the mark up to cover the cost of the former free delivery system.

Solicitation of orders, sending out goods on inspection, and other abuses which have crept into the grocery system, all cost money and all make it necessary for the retailer to increase his selling price to cover these unnecessary costs.

THE GROCER AS A FREE BANK

Commercial agencies tell us that 90 per cent of our merchants *over-buy*. But the very essence of successful business is the running of it on *minimums*. In no business is this more important than in the case of the retail grocer. And in no other business is the principle so completely ignored.

Successful retailing of groceries requires a speeding up of the stockturn or turnover. The Harvard analysis finds that a group of efficient grocers made twelve turnovers a year, once a month. But a turnover to be a sound business turnover must be complete. If the turnover is monthly, whatever remains on the shelves at the end of the month is a burden to the business. It is potential profit in slow moving or dead stock which pays no bills and gets the grocer nowhere unless it be towards the sheriff's office,

The true theory is that every dollar invested in the business should make its share of the expense and net profit of that business within the turnover period of the business: that dollars which do are profit makers and dollars which do not are profit takers. What the business needs is not a general turnover each month of an amount of stock equal to the year's average carried, but a particular turnover of everything within its proper turnover period. Each dollar must pay its way and earn its 4 per cent or 5 per cent a month or it has failed in its relations to the general business. In other words, the grocer who is striving for twelve turnovers a year and who buys any article in quantities for more than a month's supply, is not acting as a retail grocer at all; he has strayed beyond the realms of his own business.

As a matter of fact, the grocer too often buys for his shelves, his storage, his pride, his hope—for anything in the world except his turnover. And when he lays in a supply of canned goods, or fruits, anything in fact which reaches beyond the requirements of his turnover, he is simply acting as free banker for the food manufacturer and the wholesaler. And the policy of the wholesale business is to saddle its customers with these burdens which should be carried, in large part, by the borrowing power of the foods as collateral, reinforced by trade acceptances.

The arguments used by the wholesaler to shift upon the retailer these burdens which he should not assume are as old as the hills and apparently as safe and trustworthy. Indeed, it is a curious commentary on the wholesale business that it has not worked out a plan whereby it can *sell and serve* those outlets on which its own life depends so absolutely.

THE ILLS OF COMPETITION AND ENLIGHTENED COMPETITION

The wholesaler has laid unnecessary burdens on the retailer; his methods of competition have not been protective but destructive. His policy has been to deceive rather than to serve; to take all he can get and give as little as he must. He has developed his own business along unsound lines. The retailer, saddled with burdens from which he should be free, not understanding the fundamentals of his business nor its legitimate methods of finance, has sought to extend his trade, not by serving the best interests of his customers, but by fooling them into believing that he was

giving them for nothing services for which they have had to pay at ruinous rates. Neither the wholesaler nor the retailer has sufficiently considered the true interests of the consumer, nor sought to develop those services which ordinary enlightened selfishness dictate as the real foundations of business. The wholesaler has lost sight of his obligation to the retailer; the retailer has failed to appreciate his obligation to the consumer. Instead of "giving to get," both have emphasized, in a self-destructive and unintelligent way, their single desire and purpose to "get."

The inefficiency shown in the average grocery store is almost appalling. It is not departmentalized in its arrangement of goods; it has no system to minimize labor in handling, no system of stock-accounting; its bookkeeping is crude and general in character, furnishing at best general statistical information where particular information is imperatively needed. It fails to make use of those agencies for advertising, display and selling which have such a marked effect in lowering operating expense. It is operated on guess-work from garret to cellar. The average grocer cannot even approximate the cost of operating the various parts of his business, nor tell which is making him a profit and which netting a loss. The crying need of the business is a clear-cut, definite *system* as nearly self-operating as it is humanly possible to make it.

It is impossible to operate the small grocery units of today except at a high margin over actual costs and a ruinous cost to the consumer due to causes already discussed. It will be necessary to rid the field of a majority of its present units if prices are to reach their proper level.

The cure for the evils of blind competition is enlightened competition. The store which today is doing a business of \$20,000 can cut its operating expense in half by trebling its business. It can, by abandoning credit and free delivery, by a judicious use of its resources and a development of banking credits, and by a thorough mastering of the principles of its turnover, put itself into the most desirable buying class, and buy 10 per cent cheaper than its inefficient rival. It can develop a self-supporting delivery system; it can make a sane use of the telephone; it can reorganize the interior system of doing business; and it can compete successfully with its most dangerous rival, the chain store, in the matter

of prices while retaining its "store personality" and giving the women those services which they require and to which they are entitled.

But to do this, the grocer must wholly abandon the evil practices of the past and devote a part of his time and brain power to considering the wants and requirements of the consumer. To develop volume of business the grocer must develop to its limit real service to the consumer. And the first thing he must do is to get a grip on the facts of the business, definitely abandon the old plan of guessing, and run the business by such rules as the facts indicate. There must be a complete change of the prices charged, not always down, for the facts of the business will not indicate a universal lowering of prices, but decidedly down on those articles the price of which is always highly competitive. For the first service demanded by the women today is that of lowering the cost of food.

THE ECLECTIC SYSTEM

It is probable that in the competition of the future, the old doctrine that "honesty is the best policy" will find its way into the systems of the mail order house and the chain store. Certainly it will in those localities where the independent grocer has courage and intelligence. In this event, the independent grocer's advantage as a competitor for business will be even greater than it is today. But there are lessons for him in the systems of the mail order house and the chain store which it is well to take to heart. Both systems have made use of their study of the habits of buyers; both have avoided business pitfalls which the average grocer still finds in his path.

The self-serve store, with its automatic salesmanship, also carries its lessons. While it is of limited application, the principle of saving the time and labor of selling by allowing the buyer to do a part, if not all, of the work, is well worth incorporating in most of the groceries of today, not as a compulsory self-serve, but with such modifications as make it a privilege instead of a burden to the women.

Of course the system will vary with the locality and character of the trade; perhaps to a certain extent with the individual grocer. But the system which will survive, which will absorb the business

of its competitors and build a sound economic unit from the wreckage of those units which are incapable of justification, will departmentalize the store, its bookkeeping and stock-accounting; will buy for its turnover; will, in most cases, furnish a five cent delivery system, routed and scheduled for a single delivery a day; will pay its good clerks a bonus on extra business and incontinently discharge its inefficient clerks; will extend every service and courtesy consistent with low prices and reasonable profits, and avoid whatever tends to disturb its position in its community as the store which gives more for a dollar in goods and service than any of its rivals.

Readjustment of American Industries through the Development of Foreign Trade

By WALTER F. WYMAN¹

Chairman, Boston Export Round Table

THE future index of the domestic prosperity of the United States will be the volume of the exports of its manufactures. With production capacity, fabricating skill and merchandizing ability all in excess of domestic requirements, the solution to the kindred problems of maintaining domestic financial stability and absorption of available labor lies in a constant enlargement of our export tradings.

Fortunately our foreign trade—both exports and imports—can be tremendously increased. It is entirely a matter of national vision. Merchandise, transportation, banking facilities, selling ability and sources of accurate and complete information on foreign markets are already in existence. There is no need for alchemy. The one need is the enlargement of national vision to include foreign trade as a national necessity and not as a national plaything.

There are today thousands of converts to our need of international commercial exchange. The immediate requirement is positive action and not academic acquiescence in truisms. The full idea has not yet been merchandised to the manufacturers of the United States. Attention has been attracted to foreign trade. Desire for possession has been aroused. But only in a small, almost negligible, percentage of cases has positive and progressive action taken place.

The export trade of the United States today is in the same position that the Panama Canal occupied in 1900. The idea of an Isthmian Canal had then attracted a country-wide attention. Its possession was desired as a national asset. But constructive action of the *inevitably right nature* had not resulted. Today we are unquestionably headed in the right direction in our export trade. We have advanced further and more sanely than the De

¹A biographical sketch of the author is given on last page of this article.
THE EDITOR.

Lesseps project ever did at Panama. We have made and are still making our individual and governmental mistakes, inevitable mistakes which are often a credit because they are mistakes of the pioneer in his endeavors to find new routes and new methods.

In the past the export trade of the United States has been conducted solely for private profit. Its communal and national benefits have been resultant by-products of the correctly selfish endeavor of our exporters. In the new era we must, as a nation, recognize that the beneficial by-products of foreign trade are immensely valuable to the economic life of the United States. We must, as a nation, make selfish private profits from overseas sales easier to obtain. We must, as a nation, recognize the value of intelligent coöperative efforts by our manufacturers in their quest for new markets beyond our borders.

NECESSITY FOR INCREASING FOREIGN TRADE

There are several definite goals for which we must strive. The first is the abolition of non-employment of the able. The second is the conduct of business at a profit which will make possible remuneration of workers in keeping with the present and future living cost and living standards. The third is the complete utilization of existing production capacity of plants completed and under construction. The fourth is the establishment of safeguards which will make these three conditions permanent. Seasonal industries must be made into full year industries. Domestic depressions must not come in decade cycles.

A consistently increasing foreign trade is the agency through which these goals can be reached. Through international commercial exchange the United States can abolish unemployment of the able, completely utilize existing production capacity, make possible the continuance of high scale remuneration of workers and automatically ensure permanence of these admittedly desirable conditions.

These statements are mere assertions unless backed by concrete illustrations. In the field of manufactured products it has been carefully estimated that a twenty-five per cent increase in gross sales—this twenty-five per cent to be in foreign trade—offers a sufficient factor of safety against domestic financial depression for the individual enterprise. Still keeping in the field of completely finished merchandise, it has been estimated that a twenty

per cent communal export sales volume ensures the community against trade depressions. This refers particularly to a "shoe town" such as Brockton, or a "shirt and collar" town such as Troy. Similarly, it is estimated that a national foreign trade sales volume of sixteen per cent will bring into this country from without, a steady volume of payments which will absolutely prevent a national depression.

In terms of unemployment of the able a five or ten per cent figure is a national calamity. An increase in our national export sales volume of sixteen per cent will more than absorb even a ten per cent figure of unemployment of the able. For increased foreign sales volume necessitates greater employment not only in production but also in clerical transportation, finance, forwarding, institutional and scores of other broad avenues of enterprise. It means, for examples, long-continued years of shipbuilding, of a commercial navy of men as well as tonnage, of vast foreign freight terminals in every suitable harbor and of export technicians as a rule rather than as a rarity in business enterprises.

It means maintenance of remuneration of workers, for foreign trade is conducted at a profit in these days of sane merchandising abroad. It means profits to divide, because the added volume both in production and sales can be handled at a lessened per cent of overhead. It means maintenance of remuneration because it means steady employment without seasonal lay-offs. It means a full year's work at a full year's pay as opposed to alternate periods of employment and unemployment. It means a balanced income in place of the opulence of overtime followed by the poverty of job seeking.

The world beyond our boundaries will not force its patronage on us indefinitely. We cannot count on natural growth alone of our foreign trade to free us from our present dangers and to solve forever our vexed economic problems. It is time for us to make a national inventory of our assets and liabilities. It is surely not too early for us to determine our needs mental and physical. It is fast becoming imperative that we shall become cognizant of the mechanics of exporting and supply some missing parts, improve and strengthen others and drop hit-or-miss methods both individual and governmental.

EDUCATION AND EXPORT

The first stage in the accomplishment of the truly herculean task is educational. The man behind the ballot must be acquainted with the national necessity of exports of manufacturers. Public attention must be definitely focused on its individual and national benefits. I venture to suggest that President Wilson proclaim a Foreign Trade Day and that the Secretary of Commerce be placed in charge of the educational factors of its observance. This foreign trade day is not suggested as a non-work holiday. The preparations for a foreign trade day could well include a presidential proclamation of explanation, preliminary education through the "Four Minute Men" and the concerted and coöperative efforts of the press and trade bodies.

This effort to bring home to the people as a whole the importance of our international commercial exchange should be supplemented by a vigorous and sustained effort to imbue every trade organization, every board of trade and chamber of commerce with their peculiar opportunities for service. Foreign trade committees should be brought into being in every manufacturing town and city. The honorary and purely ornamental existing committees must be vivified or revived. Local and national organizations of sales executives, bankers, credit men and advertising men in particular must rise to new levels of coöperative and national service and create rather than follow demand for knowledge.

Simultaneously with the education of the voter there must be a better education of the youth of the United States to the wonderful world of business. Misconceptions by the score are fostered by our present educational methods and text books. Even in schools frankly practical in their attitude toward domestic business there are grave errors made daily in their teachings which relate to foreign countries and our comparison to and relations with these. I do not ignore the work which is still being carried on by the Commissioner of Education. I merely insist that it is more important to the future of the export trade of the United States that school children come to think of Shanghai and Canton in terms of possible profits instead of pigtailed, and of Bangkok as a city of electric lights and street railways rather than a source of Siamese Twins.

Exporting is selling the whole world. This truth must become

a matter of national acceptance. Two decades ago "exporting" meant selling to Europe. Today it means, to the mass, selling to South America. Until our national vision is broadened so that we know instantly the markets of South Africa, the Far East, Russia and India, we must remain far short of our easy possibilities in profits and insurance from foreign trade. Not two score of the several thousand exporters of the United States are "selling the whole world." Many exporters have not even a customer in India, although their sales in Brazil and England may be almost unbelievably large. Few enterprises have had both vision and courage. This condition is one which must be remedied if we are to attain world leadership.

THE PROBLEM OF TRANSPORTATION

The concrete problem of the moment and of the future is transportation. The clearest and broadest vision, the height of skill in making and selling, are powerless unless merchandise can be carried regularly, safely and at reasonable rates. The foreign merchant makes his profit from the merchandise he sells, not from goods illustrated in catalogs or displayed by salesmen. The United States cannot hope for a true foreign trade until its products can compete in delivery service with those of any other nation.

Our whole transportation activities are on an unsound basis. Excellent ports—Boston for example—are neglected, while New York is congested long before the ocean carriage needs of our export trade have reached even a present-day high level. Merely because a port with an excellent harbor, with possible large volume of manufactured articles, lacks bulk tonnage, is no excuse. Foreign trade is our present-day domestic necessity and national need. Bulk tonnage must be diverted to the ports which need it to supplement local cargo. Portland, Boston, Philadelphia, Baltimore, New Orleans, San Francisco, Portland and Seattle, and half a dozen other cities must be developed into true ports with the certainty of receiving not only tonnage of some sort but also of the specific kind of tonnage to complement its natural reservations.

■ The railroads must do their share both in self-education and in education of their clients. Terminal facilities and dry docks must be taken out of local politics and treated from a national

rather than local standpoint. Every transportation step from the manufacturers in the United States to the merchants in other lands must be investigated and a coherent national and international system of transportation evolved which will carry goods in the shortest possible time and at a cost in keeping with those under which competitive foreign manufacturers operate.

Regularly scheduled sailings, rigidly established and upheld rules for advance space allocations, systematic handling of foreign freight in transit and at freight terminals will be tremendous factors in the growth of our foreign trade. When American manufacturers can promise definite deliveries and live up to these deliveries it will not only divert trade from Europe to us but also gain more trade for us by permitting the exporting manufacturer to devote his whole time to merchandising problems.

FOREIGN BANKING AND FOREIGN TRADE

A new spirit must come into foreign banking. Today the banking interests generally are far more attracted to secure the large manufacturer's large domestic deposits and small foreign transactions than to coöperate with and develop the smaller manufacturer with a comparatively large volume of foreign sales. The banking interests of the United States need, with the manufacturer and the man behind the ballot, a broader vision. The banks must work hand in hand with the exporter. They must cease to consider our foreign trade a matter of foreign exchange or a means to increase domestic deposits. They must educate the exporter in the finer points of draft usage and they must come leagues closer to the manufacturers' problems, in the solution of which they can often be of decided service.

There is no question of the ability of American bankers to become the new standard of the world. It is merely a question of the direction of energy. The *average* English bank today in many ways is daily doing more for exporters than *any* American bank—barring three exceptions. This is not because of any qualification except a better knowledge of values. The English banks know what their customers and what their customers' foreign customers really need in emergencies. They automatically and without self-praise perform functions that are appreciated by less than half a score of our banks.

There is already in the field of credits a realization of the national importance of foreign trade. The National Association of Credit Men has worked hard and well in the last five years. Much has been accomplished and the road has been opened to still further accomplishments. The vision of the National Association has been shared by several at least of its local units. The largest conference on foreign credits ever convened in any country was held in Boston last year under joint auspices of the Boston Export Round Table, the Boston Credit Men's Association, the National Association of Credit Men, the National Association of Manufacturers and the Philadelphia Commercial Men's Association. The subsequent activities and the definite steps toward still further improvement in technique and coöperation with export merchandisers form one of the most significant and pleasing factors in our new foreign trade building.

LACK OF WORLD-WIDE VISION

The one present-day weakness on the selling end of export trade comes from lack of world-wide vision. It is the reluctance to send representatives to new markets and consequently the placing of too great reliance upon correspondence, advertising and samples as selling weapons. It is entirely true that it is well to prepare the ground in advance of a salesman's visit, but it is also true that there is waste in over-preparation. One of the important truths our government has learned is that to know, one must go. Our commercial attachés, our market investigators and our trade commissioners all are visible proofs of governmental belief in sending able, trained men abroad.

Because of the time element—for we must not postpone our export future—it is imperative that American manufacturers send now to the four corners of the world men in whose judgment and selling ability they have every confidence. These men will save a half decade as against the most rapid development by correspondence. In lines where service is a most important element—automobiles and dictating machines for example—these men can save not only time but also avoid perfectly natural mistakes which from long range are inevitable.

Before the next five years pass we shall see "tonnage men" sent out not merely by steel and oil but by many industries.

These men will not be salesmen but rather investigators who will chart countries and continents for possible tonnage increases. From the deductions to be drawn from these charts, salesmen can be placed into most profitable localities, living in them at least long enough to bring into being the tonnage reported as possible.

So far we have considered only the obvious. We have seen merely truisms and pointed out opportunities for improvement which are painfully apparent even on superficial examination. The right to assume confidently that because we want an increased foreign trade we will have one, must come from more than a prophecy based on our past or on our desires. Force of circumstance—if we omit our few hardy pioneers in world trade—has brought into being the export trade we enjoyed up to 1914. War-time necessity in foreign markets was responsible for its increase. Force of circumstance is now offset by the imperative needs of England, France, Italy and Belgium for foreign trade. The equivalent of war-time necessity will continue through 1919, but only in decreasing measure.

ABILITY AS EXPORTERS AN ASSET

Our one great asset—the golden key to the massive door that bars the unworthy from foreign profits—is our potential ability as exporters. The United States combines great skill in fabrication with first-hand knowledge of commercial mass production. It combines elimination of waste processes with ability to coöperate with competitors and non-competitors. It combines merchandising skill in securing customers and making them over into co-partners with selling sense which insists that a sale is not complete until the buyer has resold the merchandise or is in some other way obtaining a profit from his purchase.

This asset is not theoretical. It has been repeatedly proved an asset by the successful adaptation of American domestic selling methods and the requirements of foreign trade. So the way to proceed is already charted for us. Individually, communally, coöperatively and governmentally we must first see with broad vision and then advance by use of all our sources of power coordinated and synchronized. We must avoid unnecessary failures by building our export sales campaigns with such a factor of safety that they must succeed. Our advance in foreign sales should be

a steady ascent and not the result of great gains interspersed with lesser losses.

There is yet time for needed improvement in banking and transportation. There is time because it takes months and not days for a foreign sales campaign to fructify. But there is no time for delay. Unless the government will officially, frequently and forcibly make clear not only its approval of the theory of insurance through foreign trade but also prove its own desire for foreign trade by deeds as well as words, a great opportunity will pass. The government owes immediate adjustment of the whole shipping situation to manufacturers forced to immediate and radical readjustment to meet post-war conditions.

In our quest for foreign trade we must remember that we must be creative as well as active. We must develop new markets as well as seek to share in the profits from sales to long established markets. We must governmentally recognize this truth and recognize it by regularly scheduled sailings to the lesser markets and to markets now rich naturally but still undeveloped. Our banking and investing interests must seek out these markets, develop interior industry and transportation to seaboard and aid in the financing of port facilities and harbor improvements. These joint efforts of our government, banks and manufacturers can be so timely and so effective that we can rightfully monopolize both the imports and exports of market after market which will grow up in international commercial exchange knowing only the United States as a business partner.

This ideal condition can only be reached by superlatives. We must supply all the needed foreign capital. We must be the architects and constructors of wharves and warehouses—the dredgers of harbors and the erectors of breakwaters. We must supply every want and give ocean service so complete as to bar any rival from profitable competition. Above all, we must do all these things as partners and not as commercial conquerors.

There are today millions of square feet available for production for export sales. With the woman in industry and an army demobilizing, our labor potentialities are fully equal to the production space available. Through the government's own banking plan, money can be made available to finance an export trade of more billions than we can readily obtain. More and more the

American youth is being privately and publicly trained to know the surface differences which identify foreign trade. There has never been question of executive ability capable of supervising the broader details. Export managers and export technicians are constantly increasing in number. Most decidedly through experience gained in overcoming war-time difficulties they have been growing in ability and now outrank Europe's best.

We must make all export efforts of cumulative value. Each new customer for any American-made product must be so treated as to become a prospective customer for other American-made products. Each customer must become a form of salesman for American-made goods by his commendation of our merchandise and our policies in trade. We need not experiment and we must at any cost live up to our promises both of sales assistance and ocean carriage schedules. This means that our promises shall be made with the intention to perform, even though immediate returns may not prove all that we anticipate.

INDIVIDUAL READJUSTMENT OF ENTERPRISE

Entirely apart from the concerted action which has just been outlined, individual manufacturers have for months, and in some cases for at least two years, anticipated the necessary readjustment of their enterprise. The great majority of these manufacturers have planned on an increased foreign trade. The majority of this majority have planned to use increased manufacturing capacity in production of new lines—both allied and non-allied. A prominent maker of sporting rifles has plans already under way for exportation of a line in no way related to firearms. A manufacturer of brass parts plans to use four or five plants purchased or constructed during the war in making completed, trade-marked articles for world-wide distribution.

It is significant that many makers of parts, who are barred by tacit agreement with domestic customers from marketing completed articles for the domestic market, are now engaged in export advertising campaigns and plan to make their brands known abroad even though barred at home. Wholesalers as well are reaching out and selling abroad branded lines. This is particularly true of jobbers in cities which cater to the trade of Western Mexico and Central America, and to a lesser extent with jobbers

whose export sales efforts are naturally directed to the Far East. More and more the large domestic sellers of dairy products are seeking foreign markets notably for condensed and evaporated milks. This is an obvious variant of the seasonal business seeking balance by export trade.

The United States has no real choice. Either it must be content to face nation-wide unemployment or it must be a serious exporter. The one way that it can become a serious exporter in competition with England, France, Italy, Belgium and later on with Germany lies in the acquisition of world trade ambitions by myriads of American manufacturers.

Foreign trade cannot be legislated into existence. But the government should so use its transportation control within and without the United States that the exporter will be able to serve his customers. For foreign trade is international service. It entails obligations as well as privileges.

It cannot be but a few years more before an International Foreign Trade League and an International Court of Foreign Trade are established. They are necessary supplements to any council of world politics. When these two bodies—the first legislative and executive and the second judicial—are convened, the United States should be prepared to assume full memberships in both. Its claims will be based not on our war record sales volumes but on our post-war volumes and methods.

Shall we then and for decades thereafter be ranked as worthy? The answer as well as our place in the world cannot yet be given. The next few years will render argument unnecessary.

WYMAN, WALTER F. Tufts College, 1901. Sales and export manager, the Carter's Ink Company. Chairman Boston Export Round Table; chairman Export Club of Boston; honorary president Export Managers' Club of New York; vice chairman Committee on Foreign Credits, National Association of Credit Men, Committee on Foreign Trade National Association of Manufacturers, Committee on Foreign Trade, Association of National Advertisers, Inc.; chairman Committee on Educational Exhibits, International Trade Conference 1916; chairman Foreign Credits Conference 1917; chairman War Trade Board Conference 1917; chairman Foreign Banking Conference 1919. *Publications*: "Direct Exporting," "Utilizing Time," "History of an Export Order," "Henryville Stories," "Selling American Goods to the World," etc.—THE EDITOR.

Thrift and Readjustment

By ROY G. BLAKEY

Associate Professor of Economics, University of Minnesota

THE problems before us are more or less familiar to all, in name at least. Millions of soldiers and millions more of civilians backing them up have been engaged in work which the signing of the armistice has made useless. They cannot continue this work,—neither they nor we can afford to have them do nothing. They should be added to the existing labor supply, the productive energy of the nation, not in a manner to take away the work of others and cause idleness or unemployment, but in such a way as to produce an additional amount of goods and services somewhat proportionate to the amount of labor added to that already engaged in the industries of peace.

Modern production is carried on mostly by machinery. Old machinery not of a character to aid in the war probably has not been kept in good repair and practically all of the new has been constructed for war purposes. Some of the latter can be converted easily to peace-time production, some can be changed only at a considerable cost, some will be nearly a total loss.

It is easy to say that this labor and plant must be converted to peace uses; it is another thing to bring about a proper readjustment, a readjustment that keeps all parts of the industrial machine working in unison while it is turning out the proper kinds and quantities of goods and services, that is, turning out such quantities of such varieties that they will exchange on such bases that the industrial machine will be kept going at the maximum of efficiency.

Some have suggested that there may be an oversupply of labor; this is one of the most persistent and mischievous half-truths of all the half-truth clan. One might as well say there is too much capital or too much land, or too much water. In a certain situation there may be too much land to go with the amount of water or labor or capital or something else available at just that place and time; it is largely a question of proportion. So there may be too much labor in some particular case to mix to advantage

with the other ingredients or factors of the local industrial situation. But so long as men have wants that are unsatisfied and which can be satisfied by working there can be no general oversupply of labor. For all practical purposes, the economists are correct in assuming that human wants are indefinitely great, that as soon as some are reasonably satisfied, other and usually larger ones take their places. A boy longs for a bicycle; by the time he gets it, he wants an automobile, a yacht, an aeroplane. There is no limit to wants—hence no limit to labor to be done. The difficulty is in connecting up the man and the job under proper conditions.

The fundamental features of our present industrial régime which are essential to have in mind for present purposes are division of labor, large-scale machine production, and organization and management by captains of industry who pay wages to laborers for their services and who buy their raw materials and sell their finished products in a more or less competitive market. Production is for the market and for a profit. In the case of both managers and laborers, expenses and income take the form of money prices, prices for goods and prices for services. It is assumed that for the most part, any one is free to buy or sell goods or services wherever and whenever he can do so to his own best interests. It is assumed, also, that the free play of competition in the selling and buying of goods and services for money prices to secure individual gains, with only a minimum of government regulation, will result in a greater balance of gain to society than would general regulation by a king or by government officials whose limitations have so often been proved in the past.

PRICE THE REGULATOR

It is important to see that in this competitive industrial régime the governor or regulator of action is price, future or anticipated price. Shall the managers of railroads, of steel plants, of building operations, of this or that enterprise, order this or that quantity of raw material, take on this or that amount of additional labor or let off part of what they have?

The answers depend upon what prices will have to be paid now and in the future for labor, raw materials and other factors in production and what prices will be received ultimately for fin-

ished products. Some of the returns on this year's expenditures may be received this year, but in many instances, as for example in the cases of expenditures for the construction of railroads and factories, most of the returns will be strung out over many years, often for several decades. Every manager who does not make a sufficiently good estimate of the thousands of prices involved in the near and distant future leads his enterprise, not to profits, but to bankruptcy. Every laborer who misjudges the operations and results of the industrial complex, most of which are both causes and effects of prices, fails to profit to the maximum in securing the best prices for his services; in fact he may, at more or less frequent and prolonged intervals, be idle and unproductive. Bankruptcy merely takes a different form in his case.

Future prices are uncertain at all times. The annual lists of business failures, labor disturbances, losses, unusual profits, etc., are sufficient proof of this. The European war, with its extraordinary demands, its accompanying inflation of credit, its partial regulation of prices and its many other imponderable influences, has brought about a situation which makes future prices much more uncertain than they usually are. Nothing of importance that one can mention, whether it be the reaction from government control, labor unrest, Bolshevism, the league of nations, the German indemnity, or what not, is without significant influence on future prices which are now governing industry's plans for the near and distant future.

When men are in doubt they hesitate to go forward; when the road ahead suddenly becomes extremely uncertain or filled with obstacles, they suddenly shift to lower speed or even throw on the brakes and come to a dead standstill, thus blocking the progress of every one else. The war has raised prices to an enormous height. Some are relatively much higher than others, but all are high. Now that the war is over, exactly what is going to happen this year and the next and the next to this, that and every other price, including wages, the price of services? Give a definite and authoritative answer to this question, one which everybody can accept with assurance, and the industrial machine will immediately begin to regain momentum. If to certainty could be added industrial and social equity, even the war-time speed could be exceeded.

Let no one misunderstand us to say that high prices are the cause of all evils for they are far from being the only obstacles to readjustment. In fact, we could soon become adjusted to prices at almost any level if they were relatively stable. It is because prices have been made so high by temporary circumstances that their future courses are extremely uncertain. Even if prices were stabilized there would still be many problems to solve, hence in emphasizing the importance of giving more stability to prices there is no intention of over-emphasis nor is there any belief that any remedy will prove to be a panacea. But it is true not only that the giving of more stability to prices would help materially in our industrial readjustment but it is true also that a very simple, effective and old fashioned remedy can easily be adopted by the American people if they appreciate its efficacy and the desirability of its use.

MONEY AND CREDIT INFLATION

Before any cure is suggested, the cause should be recalled. Why are prices so much higher than before the war? The war's demand raised the prices of those commodities badly needed for war purposes but the same cause would tend to lower prices of goods not needed for war. As a matter of fact, nearly all prices have risen. In other words there has been a *general* cause affecting all commodities and in the case of prime war necessities there has been an additional cause, so that prices of such goods have risen the most unless kept down by government regulation. Hence, the ending of the war removes one of the main causes affecting war necessities, though the present need of food and re-equipment, especially in Europe, will be a large, unusual and somewhat disturbing factor for months to come. But the chief cause of the general rise in prices has been credit inflation.

Put in another way, there has been too much borrowing rather than saving to secure funds. Borrowing increases bank credit which takes the place of money. Money is a counter or ticket used in exchanging goods. If the number of meal tickets is increased more than the food for which they are exchanged, each ticket becomes worth less, or more tickets have to be given for the same meal. If money, or bank credit which takes its place, is increased more rapidly than business, or than goods for which money is

exchanged, then each ticket or dollar becomes worth less or it takes more tickets to get the same goods. Prices go up as we say. An increase in money and bank credit proportionate to the increase of business or goods exchanged will result in little or no change in prices, other things remaining equal.

An appreciation of the cause suggests the remedy. There is no way to eliminate the inflation except to produce and save a surplus so as to restore the former proportion between goods and counters. The production and saving of goods enables one to pay off his debt and thus cancel that much bank credit. If no debt is paid, the creation and saving of goods increases the proportion of goods to money counters and thus helps to reduce inflation. But before going further it might be well to note a few statistics indicating the extent of the present inflation.

The total general stock of money in the United States in millions of dollars was 3,736 on August 1, 1914, at the beginning of the European War; 5,312 on April 1, 1917, when we entered the war and 7,781 on January 1, 1919. The above figures include (1) money held in the Treasury as assets of the government, (2) money held by federal reserve banks and federal reserve agents against issues of federal reserve notes and (3) "money in circulation." If we take only the money in circulation for the three dates above, the figures are 3,367, 4,702 and 5,951 millions of dollars respectively. Expressed in terms of percentages, the general stock of money for the three dates is represented by 100, 142 and 208 and the money in circulation by 100, 140 and 177.

The loans and discounts, plus overdrafts, bonds and other securities, which are mostly sorts of loans, for all banks in the United States (except federal reserve banks) in millions of dollars were 20,924 in 1914, 28,645 in 1917 and 32,316 in 1918. In other words the most important items of bank credit show an increase of 37 per cent between 1914 and 1917 and a still further increase to 54 per cent in 1918. Complete up-to-date figures, if available, would doubtless show a further increase.

The United States Bureau of Labor Statistics takes 1913 prices at 100 as the basis of its index number for principal classes of commodities in the United States. The following approximate figures indicate how general prices have risen:

	1913 (Basis)	Aug. 1, 1914	Apr. 1, 1917	Jan. 1, 1919
Wholesale prices.....	100	99	171	200
Retail prices.....	100	102	143	187

According to the same authority, rates of union wages per week, full time, have risen from 100 in 1913 to 112 in 1917, and to 130 in 1918, the wages for May when annual contracts are annually made being taken in each year.

The effects of the money and credit inflation in the United States are confirmed by the experience of Great Britain and other countries. For example, the bank note circulation of the United Kingdom increased 157 per cent from July 1914 to November 1918 while general prices increased 142 per cent. There can be no doubt of the inflation nor of the effect of inflation upon prices.

This inflation has made the government's expenses higher and its war debts more enormous. Wages and salaries which have not risen as fast as prices buy less than before the war. A thousand dollar insurance policy, if paid now, would buy little more than half what it would have bought if paid five years ago. The long-time investments of savings banks, insurance companies and others bring in the same number of dollars in interest as formerly but the dollars have less purchasing power and the capital or market values of the investments themselves have shrunk. In the interest of all recent contracts there is reason for continuing inflation so that the contracts may be settled on an unchanged price level; in the interest of pre-war obligations the argument is for a return to the pre-war price basis. For example, war debts could be paid more easily with cheap dollars if the present inflation were continued than with dear dollars if there is much deflation. There is even much argument for the continuation of inflation as means of meeting the extremely difficult problem of wage readjustment. It would certainly smooth over some psychological obstacles, though it might not improve the equitableness of the general situation.

But there are weighty reasons against continuing the present inflation. In the first place it threatens the gold standard upon which our monetary and banking systems are based. Why all the anxiety over the decline in gold production? The reason is that financiers are fearful that if much more credit is added to the

base of the inverted pyramid the present gold reserve which forms its apex will be too small and narrow to keep it from tottering. This is in spite of the fact that there are now over three billion dollars of gold in the United States as compared with less than one billion nine hundred millions August 1, 1914, an increase of 60 per cent.

As mentioned above, to keep prices stable, money and substitutes for money should increase at about the same rate as the increase in the production of goods. Even before the war, gold output and credit based upon it were increasing more rapidly than goods so that prices were rising. It is estimated that during the war our production of goods increased by 20 or 25 per cent but our money and credit by over 50 per cent, so that prices have risen more rapidly than ever. If paper money or bank credit were always generally acceptable in exchanges, as they have about come to be in the United States, and if the amounts of the same were always kept proportionate to the amount of business done, use for gold would be for the arts only and most of the human energy that is devoted to prospecting and mining gold might be turned to the production of wheat, shoes, houses, and other necessities which so many of our people lack. One of the chief reasons why we cannot cast gold aside and rely on paper or fiat money is that no set of legislators has ever been found that can resist the temptation in times of stress to raise money in an easy way. Why levy burdensome taxes when the printing press can turn out a wagon load of money in an hour? Of course, this is increasing the counters without increasing goods produced. It is inflation with all of its evil consequences.

Gold is a better money because it is so difficult to discover and dig out; the cost puts a limit upon the output. The more the output is limited the more each ounce is worth; as it becomes worth more there is greater inducement to increase production until each ounce becomes worth less. Then production is checked. Thus there is an automatic regulation of gold as a monetary basis. But so long as legislators possess their present human frailties, there can be no such regulation of paper money output except by making it redeemable in the costly gold.

The high prices caused by the recent credit inflation make gold costly to mine, hence we hear a good deal about stimulating gold

mining by means of premiums or tax exemptions or other bonuses. Such measures are foolish; they try to destroy artificially the automatic and salutary regulation of gold production mentioned above. The trouble is not that there is too little gold in our reserves, but that the gold we have is called upon to hold up too large a volume of inflation. Reduce the inflation and promote stability instead of adopting artificial measures which in the long run are apt to act as boomerangs.

There is another important reason for checking and decreasing inflation. That is foreign trade which, of course, includes European reconstruction requirements. Devastated European and other countries need our goods, the former especially need them badly. Large foreign orders would allow many American plants to run at 90 per cent instead of at 60 per cent capacity and would give employment to thousands of men and either directly or indirectly would stimulate agriculture, mining, transportation, and every other industry in the United States.

But foreign orders are not coming here in quantity for two main reasons, first because of lack of means to pay for American goods, second because of uncertainties, especially, high and uncertain prices. How shall the war burdened European countries pay for American goods? They cannot well spare gold. Their credit inflation exceeds ours. It rests upon a smaller apex of gold reserve. Besides we do not need their gold. More would result in higher prices here and consequently fewer orders from them. They can pay partly but not entirely in goods which they may send us. Inasmuch as they cannot spare their gold to pay for the balance, if we are to ship the large quantities which we should for the sake of our own interests as well as theirs, we must arrange to grant them credit. This means that America must send them goods and accept pay later; in other words, that America must produce and save a surplus for export.

But with prices as high and uncertain as they now are, foreign as well as American enterprisers hesitate to buy. Their expenses and capital investment might easily be so great that when lower prices come they could not meet interest and other costs. They would be in danger of having losses instead of profits; in fact, many would probably end in bankruptcy, and in the long run it would not be wise for American investors to finance such undertakings

on the present price level. It is obvious that the development of a stable and solvent foreign trade would be a big step in the solution of our immediate readjustment problems and would bring in dividends for years to come, to say nothing of the immense benefits to devastated Europe.

THRIFT THE REMEDY FOR INFLATION

We have already seen how the increase of money and credit has outrun the production of goods, due largely to the fact that bank credit, that is, borrowing, has increased faster than the production of goods; or, to put it in another way, because the great mass of American people have borrowed to buy when they should have saved, and thus have brought about an unstable situation which is one of the main obstacles to readjustment.

The government expects to have another huge loan drive in April and may have to secure billions in addition through war savings stamps or through the banks later. In so far as such borrowings are not paid out of the surplus production and savings of the people of the United States they will add to the existing credit inflation. Besides the government, the railroads, industrial enterprises, farmers, and others throughout the United States need vast amounts of capital. Inflation and all its evils can be cured in no other way than in the production and saving of goods which will allow the paying off of debts and the restoration of the proper proportion between money counters and goods.

This is no time for checking production, especially production of equipment and other durable goods, nor is it a time to let up in our war on waste. Conservation of resources, planning for the future, wise spending and economy are scarcely less urgent now than before the armistice was signed. The savings movement born of the war should be continued and developed. In fact, there is a pressing need for every agency and person in the United States whether savings bank, insurance company, manufacturer, merchant, miner, artisan, farmer, or individual of whatever interest, to coöperate with the government in its nation-wide campaign to make thrift a national habit.

Making National Debts National Blessings

By SIMON N. PATTEN, PH.D.

Philadelphia, Pa.

JAY COOKE, the noted financier of our Civil War, invented the maxim: "National debts are national blessings." This seems a paradox and yet its truth can readily be verified. The thought is not that destruction is the motive for industry but rather that necessity is the mother of invention. Men and institutions are too conservative. Controlled by habit, tradition and routine they lag behind the actualities which evolution creates. The world moves on by huge mutations and not by a multitude of minute variations. There is thus both theory and fact back of Jay Cooke's slogan even if war slackers will not admit its validity. The world today faces such mutation, the destructive part of which is already apparent. War debts are its visible evidence. The reconstructions are ahead. World debts are the force which will make us accept the new order.

This world debt may be met in two ways. If we let blind forces decide who shall bear the loss, a great financial panic will occur. World values will fall to a far greater extent than the loss actually incurred and he will bear the burden whose values relative to others fall the most. The nominal bearers of burdens are thus not their ultimate bearers. The French did not pay the indemnity of the war of 1870. The bills were settled by the financial panic of 1873 through which America lost more than France because her values were more inflated and hence less stable. Fix the payment of the present war debt as treaties may, England and America will bear the burden of it if a financial panic determines on whom the payment shall rest. From him that hath shall be taken, is the crude law of panics and who is he who hath, but America? Our war debt and the inflation of money and credit which goes with it amounted to thirty billion dollars. The depression due to a world panic would cost us a like sum. Together our losses would be a quarter of the two hundred billion of values we had when the war began.

So much for one way of meeting a world crisis by paying for the

war by our blood, sweat and suffering and then paying for it again by the disasters which follow in its trail. The other method converts disaster into a blessing by making industrial readjustments pay national debts and in addition create a surplus to enable other long needed reforms to be made. If the new situation stirs our energies, removes prejudices, overcomes conservative stupidity, forces the use of new industrial mechanisms and so modifies our political institutions that they can function in our modern world, —if all these and other available adjustments are made, our children will bless the war instead of regarding it as a curse.

It was the debt of the Revolutionary War that forced the adoption of the national constitution, which constitution, through its benefits, paid for the war without taking a dollar from the pockets of anyone. Again in our Civil War did Jay Cooke's maxim prove its worth. Its debt was paid not by the sweat of labor but by the great inventions of the epoch. The Western expansion, the harvester and the sewing machine and the locomotive, besides paying the national debt, left a surplus for all to enjoy. Shall we face debt as our fathers did by corresponding improvements or shall we cause disaster by stupid inaction? Below is a plan which, protecting industry from loss, would yield a gain for all to enjoy.

EXPLANATIONS

In the plan there is little new. It contains merely a clear statement of the cogent demands of the leading agents in production in language which can be understood and accepted by other agents and by the public. The new is not in these demands but in the way they are to be met. In the past, each group has presented its claims and assumed that their increase of income should come at the expense of other agents. In contrast to this I would find what are the legitimate demands of each agent and then see if these added costs cannot be met, not at the expense of others, but by an increase of industrial efficiency. I make therefore a national budget of increased costs and one of possible improvements to see if the costs of the one cannot be paid out of the surplus of the other. If so each group has an interest in an enlarged production which would liquidate its claims without creating burdens for others to bear. The data I use in this

compilation are those of 1914 unless they are plainly abnormal. All changes and per cents are differentiations from this base.

The urgent demands of the workers are for shorter hours, increased pay, the right to organize, and compensation for risk and disability. The farmers want higher prices for their products but resist the increased prices which the demands of other agents would make. The laborers want more wages at the expense of capital, and employers desire more profits through reduced labor costs. Each group thus assumes a fixed national income but demands an increase of its share at somebody's else expense. The struggle is thus transferred to the area of distribution with all the bitterness which such struggles make.

The national wage bill for 1914 was ten billion dollars. The total national income at that time was perhaps forty billions, wages receiving on the average about a quarter of the value of the goods produced. Another estimate reaches the same result. The population of the nation was one hundred millions. Ten billions in wages would mean one hundred dollars for each man, woman and child. As the typical family is composed of parents, three children and one dependent, this would give \$600 as the average income of workmen's families, a sum verified by other available data. If these be the facts, a 50 per cent rise in wages would demand the payment of five billion dollars annually. Much would be returned in increased efficiency but not enough to meet this bill. A fair estimate would be that the deficit created would be about 40 per cent of the whole, or two billion dollars. To pay this, together with the assumption by the employers of industrial liabilities, would involve an increase of 15 per cent in the value of products above those of 1914. This would be the cost of providing a decent standard of life for workers other than those general changes demanded by the good of the whole nation.

The need of the farmer is primarily for a stability of agricultural prices. At present, farming is a gamble and the mental attitude of the farmer is one of extreme pessimism. This seriously reduces his effectiveness and prevents the increase of agricultural products to the degree demanded by public welfare. A second need is for protection against race degeneration in rural communities and a third is for enforced coöperative enterprises which will enable joint production to be carried on to an advantage. The isolated

self-sufficing farmer, however valuable in the past, is now a drag on every rural community. Coöperative farming is as necessary as large scale production in industry and would produce as valuable results.

To gain a stability for agricultural prices demands not a fixing of average price but of a point below which prices cannot fall. At this point goods must be taken off the market, stored or transformed into products capable of increased transportation, or freed from the danger of deterioration. This will be the public cost of stable farming but it will be more than met by the lower average price. I have excluded corn and oats from the action of this measure because their prices are sufficiently stable under present conditions. The price of land fitted for their production is also above the \$100 limit. The need of price fixing is especially apparent in the case of wheat and potatoes. All garden products would be likewise benefited. Germany has found a minimum price of potatoes extremely helpful.

The productivity of land increases as its price rises until the point of maximum productivity. I have assumed this point to be reached when land is valued at \$100 per acre. Higher land prices tend to emphasize net at the expense of gross product and to increase the evils of tenant farming. This evil should be met by taxing rented land.

I also suggest a zone tariff for transportation in the place of the mileage rate now enforced. Mileage rates make the cost to the consumer that of the most disadvantaged farm while the benefits of lower rates for nearer points do not go to the farmer but are absorbed in increased land values. A zone rate the same for all producers would thus lower consumers' costs, cause products to be produced at points of greatest advantage, and give stability to all producers.

With the solutions suggested for the improvement of the worker and the farmer the public is familiar and on the whole favorably disposed. If it can be shown that they are practical they would be eagerly adopted. But the changes involved in an efficient business program would meet with severe opposition. The doctrine of free competition has been thoroughly instilled into the public mind by ages of practice; the transformation to an epoch of industrial restriction will therefore not be an easy task. The fear

of monopoly is a menace which can be avoided only by a rigid system of state regulation. The experiments of the war epoch have, however, shown how this can be done and their success constitutes one of the great benefits of the war.

The assumed inability to fix reasonable prices either for goods or services has not proved so great as was assumed. Book-keeping has become a science and cost accounts should be kept by every large establishment. When some common system of accounting has been devised and enforced, sound estimates can be made as to each element of cost and of the relation of cost to profit. Reasonable prices and fair profits are then an easy task to determine. Sometime the transition from competition to regulation must be made. Why not make it now when its effects are so much needed to solve other problems? It is through the increase of industrial efficiency that the costs of progress must be met. Distributive schemes fail through the animosities they create. Increased production and mutual aid are the only solvents of the problems inherited from long ages of want, and made vivid by the antagonisms of race and class.

Government regulations of this sort leave the individual as he is with all the variety of motive and interest which men now exhibit. The scope of individual initiative and personal choice would be largely increased and made real to all classes. Were all the proposed improvements made, no one would note the change on the street except for the absence of poverty and the presence of cheer. The difference would show itself in the mechanism of industry and the coördination of effort. When men work they would work with each other and not at cross purposes. Industrial units would be on so large a scale that the individual would be no more conscious of them than that the world turns on its axis. It is bad, imperfect mechanisms so small and complicated as to demand individual attention which make us their slaves. Great mechanisms are the basis of personal freedom. They save time and energy for objects of greater personal moment. Friction can thus be removed and self-initiative encouraged without the repression which a close supervision of individual acts creates. It is the individual who should be free, not the great mechanisms of production.

CONCLUSION

The cost of the war may amount to thirty billion dollars to which a like sum may be added if a lack of foresight permits a world crisis to generate its destructive power. A full coöperation between worker, farmer and producer is needed to thwart this evil and to create the fund out of which the deficits of progress may be met. Mutual effort and the utilization of known devices would add from sixteen to twenty billions to the annual income of the nation. The cost of this would not be more than eight billions and might be much less. This would mean a 50 per cent increase in wages, a 5 per cent return on safe investment, \$100 an acre as the average price of farming land, stable prices for all agricultural products, a 10 per cent return on active capital, a sixty billion annual income and an increase of national wealth from two hundred to three hundred billion dollars. Such is the change measured in dollars. The improvement in health, longevity, education and efficiency are equally apparent. A world is in sight in which none are ignorant, few die before the age of sixty, where poverty is unknown and disease ceases to terrify. Shall we let old antagonisms and senseless stupidity keep us from a goal which mutual good will could readily attain?

NATIONAL BUDGET
New sources of national income

	<i>Millions</i>
Control of mineral products.	\$500
Increased use of tropical products.	500
The utilization of chemistry.	500
Improved market facilities.	500
Railroad economies.	500
Decrease in adverse balance of trade.	500
Water rights and water ways.	500
Office economy.	500
Administrative efficiency.	1,000
Food conservation.	1,000
Prevention of disease.	1,000
The standardization of products.	2,000
Joint mass production.	2,000
Stabilization of agricultural prices.	1,000
Elimination of sales costs.	1,000
Increased efficiency of labor.	3,000
Total.	\$16,000

ADDITIONAL NATIONAL COSTS

	<i>Millions</i>
Interest on debt.....	\$1,000
Pensions.....	1,000
Sinking fund.....	1,000
From rise of wages.....	2,000
Costs of industrial transformations.....	600
Industrial liability.....	500
Health supervision.....	500
Child culture.....	400
Vocational training.....	400
Community welfare.....	400
Research and experiment.....	100
Super-education.....	100
Total.....	\$8,000

FARM MAXIMS

1. The increase of production comes not from an enlarged acreage but from a better use of good land. A bad year for good farmers is a good year for bad farmers.

2. Any product which can be raised south of the frost line should be raised there.

3. Gross production is limited when the price of land rises above \$100 an acre.

4. The farming unit should not be less than that needed to employ two men at full time.

5. The dearer stock and tools are in the end the cheaper.

6. The home uses of food are more important than those of the market.

7. Farm prices should not be a gamble but a certainty. Stable prices are better than alternating high and low prices.

8. Local associations should control the occupancy of farms and enforce coöperative enterprise.

9. Every community needs defensive measures to protect it from race degeneration, and coercive measures to promote production.

10. Each agricultural unit whose industry conforms to public interest should be placed in a position to compete on the common market. For this end a zone tariff affords the best solution.

11. All staple food crops except corn and oats shall have a

guaranteed minimum price estimated at 80 per cent of the average price for the past ten years.

12. No importation of farm products shall be permitted where the price falls below the average of the past ten years.

13. Experiments of national import shall be made in the preservation of food products from season to season and when successful shall be operated on a sufficient scale to stabilize food prices.

14. Elevators, stock yards and other means of marketing products shall be made common property subject only to such fees as are needed for their maintenance.

15. Farm tools and improvements shall be exempted from taxation except for schools and roads. Nor shall dairy farms be taxed for more than 60 per cent of their value.

16. All rented land other than to members of the same family shall be subject to a tax of 10 per cent on the rent received.

LABOR MAXIMS

1. The working day shall be limited to eight hours, the week to forty-four hours and each year shall contain a two weeks' holiday with full pay.

2. The expense of removing the causes injuring laborers or reducing their vitality shall be regarded as legitimate costs to be borne by each industry.

3. All attained standards shall be regarded inviolate.

4. Laborers shall favor industrial improvements and share in their advantages equally with employers.

5. When labor is displaced by improvements, this labor shall be compensated for its loss out of the profit arising from the improvement. When this cannot be measured, the burden shall be accepted by the state and paid for out of the general surplus of society.

6. All health regulations affecting the workers shall be regarded as public charges if their causes lie beyond the control of specific industries.

7. Where the work of an industry incapacitates or reduces the efficiency of the worker before sixty, his support is a legitimate charge on this industry until that age is reached.

8. One thousand dollars shall be regarded as the minimum standard necessary to provide for the support of a family. Where

superior efficiency is demanded in any occupation, sufficient additional remuneration shall be given to evoke the needed skill.

9. Workers shall not demand the control of the industries in which they work but they must have the right of collective action and of collective decision. They are entitled to all the facts which bear on wages, costs, prices and on industrial effectiveness. When these facts are given, no publicity shall follow unless the management and the workers fail to agree as to the policies involved.

10. Workers shall control the conditions of membership in their unions, but these regulations shall conform to public interest and be subject to public revision.

11. The education of children shall continue until the completion of their eighteenth year before which age they shall be excluded from industry except as part-time apprentices subject to the rules of the union concerned and of the educational authorities.

12. Every industry shall supply continuation schools in which the worker may attain the maximum efficiency of his occupation.

13. Where women and men do the same work their pay shall be the same. If women are excluded from unsuitable occupations, corresponding occupations shall be reserved for them subject to such regulations as their health and public welfare demand.

14. All industrial occupations shall be conducted on the ground floor and each plant so isolated that the worker may have a home of his own. Industrial plants shall be at the perimeter and not in the center of each town. The zoning of cities for this end shall be enforced by public regulation.

15. No taxes shall be laid on the food of workers nor shall special taxes be placed on their clothing or on housing material.

16. Organized labor favors coöperation with associations striving to promote public welfare and stands ready to do their part to make this larger unification effective.

BUSINESS MAXIMS

1. Joint mass production shall be encouraged under such regulations as conserve public interest. To this end a national board of industrial control shall be formed with powers similar to the interstate commerce commission.

2. National boards shall also be constituted to control water privileges, forests, mineral resources, the standardization of products and the protection of investments.

3. The legitimate capitalization of these joint enterprises shall be their present physical valuation plus 20 per cent.

4. If the present capitalization exceeds this limit, one-half of the net profits shall be set aside to reduce liabilities or to increase the value of plants.

5. The return on capital thus invested shall be double that of secure investments. Any excess of this return shall be divided equally between the enterprise and the public.

6. On the boards for the control of joint enterprises both the workers and the public shall have representation.

7. In these joint enterprises injury to workers or a reduction in their efficiency shall be accepted as a burden to be met by an increased price of the goods produced. They shall not interfere with the organization of their employes nor refuse to treat with them in their collective capacity.

8. All new issues of stocks or bonds, all new corporations soliciting subscriptions, all public presentation of schemes of investment, and all attempts artificially to raise or lower prices, shall be under the national control.

9. No increase of prices shall be permitted without national consent.

10. Where the sale or purchase of commodities involves foreign commerce, joint boards of control may be established to expedite such transactions with the right to hold property, to own ships and to control business facilities in the regions where they trade. Such enterprises shall be allowed a double profit on all capital legitimately employed.

11. The unification of existing railroad systems shall be permitted when such combinations permit a better routing of goods or prevent a duplication of facilities. All gains from agreements to lower costs shall be used for betterments or to reduce liabilities. The resulting values shall not be made the basis of stock issues nor of stock dividends.

12. Where corporations have developed with complex underlying obligations a simplification shall be permitted into two classes, mortgage and stockholders. Underlying securities whose holders refuse to be partners in such simplification shall be taxed 50 per cent on the excess of their return above 4 per cent on the original cash investment.

13. Mineral products are declared to be mutual national possessions and subject to such restrictions as to extraction and sale as public interest demands. All royalties exceeding 10 per cent of the value of the product shall be taxed 80 per cent.

14. A board for the control of agricultural products shall be formed with power to regulate price and to stabilize production.

15. Retailers shall be permitted to enact protective regulations subject to the supervision of the national board of industrial control.

16. Joint experiments for the reduction of costs shall be encouraged in all fields of production. On capital thus employed, 100 per cent profit is permitted during the first twenty years of the use of product.

POSTSCRIPT

The program outlined above would suffice to meet our internal problems yet the same difficulties are encountered on a much larger scale in our international relations. Many nations are likely to be unable to meet their obligations. Even France is not free from the danger of bankruptcy. We may therefore be compelled to enter into foreign alliances to stem a world tide of disaster even if our home affairs are satisfactorily cared for.

Three policies are open to us. An international league of peace, an alliance with England and a policy of isolation. A league of peace has moral and political advantages but its influence on the economic situation would be limited. We can successfully continue a policy of isolation only by the addition to our territory of lands to the south. We have scarcely any land free from frost while tropical products are of increasing importance. With this modification, a policy of isolation could be economically successful. We are not yet dependent on world commerce for the needed industrial expansion.

There would however be many gains from an economic alliance with England to safeguard our world interests and to give our ideals and traditions a lasting supremacy. The control of the sea is now Anglo-American. If it were used for humanitarian ends not only could economic prosperity be given the whole world but much could be done to ensure political stability.

The key to world peace is in the control of the sea. Those who

control it also shape world ideals and make world traditions. Economic prosperity is thus the forerunner of world unity and this prosperity is now in Anglo-American hands.

It seems advisable therefore to complement internal economic solutions with that larger world solution for which the position and importance of our race have made us responsible. The maxims which follow would give an external security as great as that to be obtained by the internal policy above outlined.

ANGLO-AMERICAN MAXIMS

1. The English and American people are declared to be an inseparable coterminal unit with mutual rights and duties.

2. Our inherited institutions, ideals and traditions are declared to be the only basis of a new world order. No nation shall be treated as an equal which does not accept them in their entirety.

3. No binding treaty shall be made with other nations except by the knowledge and consent of both nations. Any existing treaty violating this provision shall be revoked.

4. The assent of the Irish race is indispensable to this unity. Their rights and sentiments shall receive equal consideration to that of other integral parts of the alliance.

5. America shall have a super-sovereignty over the American continent. America and Australia shall have a like sovereignty over the Pacific ocean and its islands.

6. No nation shall have the freedom of the sea for its products which subjects its exports to any excise tax unless the proceeds are used solely for health, sanitation or industrial improvement.

7. No nation shall be given the freedom of the seas for its products which oppresses any part of its subjects on account of religion, race or other prejudices. Nor shall they keep armies beyond the need of internal protection.

8. All the mineral resources of the world shall be subject to sea control if their shipment is necessary. Nor shall tropical advantages or tropical people be exploited by any one for selfish ends.

9. The control of every sea is essential to these ends. All acquired rights shall be maintained and every precaution taken to make this control effectual.

10. This control shall not be used for the material advantage of any part of the Anglo-American realm. Nor shall it be used

to collect debts in foreign countries nor to enforce laws. Subject to necessary restrictions the trade and commerce of the world shall be open to all on equal terms.

11. Adjunct states may be formed by either nation within its sphere of influence. Such states shall control their local affairs subject to such regulations and limitations as are needed to preserve the alliance and to extend its influence.

12. A special supervision may be exercised over states organizing themselves on an Anglo-American basis. For this end Asia Minor, Persia and China are declared to be under Anglo-American protection.

13. No interference in the affairs of independent nations is intended. They shall have the same right of self-initiated progress which the Anglo-American race claims for itself.

14. The control of infectious disease is declared to be essential to the success of this alliance. For this purpose a tax may be laid on ocean commerce.

15. International commerce may also be organized and mass production encouraged so that a net profit may be created to pay the debts of nations incapable of meeting them.

16. Other coördinate nations may be admitted to this alliance if they accept these principles and permit public opinion to be molded by the same moral forces which create Anglo-American sentiment.

The Readjustment of Industry in the United Kingdom

By C. DELISLE BURNS, M.A.¹

London, England

THE industrial problem during the transition from war to peace is only in part administrative. Especially in England, where the state has never entered into industrial life without hesitation, the problems of manufacture and commerce will probably continue to be dealt with by private enterprise. Even in the confusion which may result from the sudden end of a great war, the government official is not regarded as the best person to solve problems of industry; and therefore the activity of the central government is confined to supervision and regulation of industrial life. Our statement of the issues involved in the industrial transition is limited and defined by these facts, and we shall describe the problems and the solutions adopted from the point of view of administration and governmental policy and not from the point of view of commercial or financial interests.

GOVERNMENT PREPARATION FOR RECONSTRUCTION

Reconstruction has been recognized since early in 1916 to be one of the tasks of the Government which would necessarily follow the war. Under the Asquith Government of that date a Committee of the Cabinet was appointed in March, 1916 to consider the problems and to prepare a policy for the time which would immediately succeed the war. That Committee, with various sub-Committees, began the devising of a plan for demobilizing the army, discharging civil war-workers and other urgent after-war issues; but it also considered problems of permanent policy, such as housing, education and the rest.

At that time the great transformation of the engineering industry for the manufacture of munitions had not been completed, and the industrial problems of the future transition to peace appeared to be largely problems of the supply of labor. When the

¹ Mr. Burns is author of "Political Ideals," "The World of States," and "The Morality of Nations."—THE EDITOR.

Lloyd George Ministry took office at the end of 1916, the consideration of after-war problems was continued by the old sub-committees; until, in March, 1917, a Reconstruction Committee was appointed, consisting of persons of standing in social knowledge, and in industrial and political experience. This Reconstruction Committee was to advise the Government on after-war problems; and it continued to operate until August, 1917, when the Ministry of Reconstruction was created.² The old sub-committees continued to exist and new committees were appointed. The industrial problems had by that time become very complicated; and Dr. Addison, the first Minister of Reconstruction, who had lately been Minister of Munitions, was well aware of the difficulties which the immense production of munitions had created in the chemical and metal trades.

The investigation of the after-war industrial problems was considerably extended by the Ministry of Reconstruction. An Advisory Council to the Minister was appointed, which consisted of leading men and women, both on the labor side and on that of employers. The problems of Finance, Commerce, Transport, Raw Material Supply, and many others of a similar nature, were carefully considered; and a special committee was appointed to consider possible developments in the Engineering industry.

The policy of the Government, therefore, followed the same lines as had been adopted by the Asquith Government, in preparing a general scheme first for the transition problems and secondly for the more permanent problems of readjustment to peace conditions. There had been a Cabinet Committee of the heads of Executive Departments and afterwards an Advisory Committee of experts; and now there was a responsible Minister with a Department, and experts as advisors. The organization of the Department was based on the distinction between the different problems as far as they could be foreseen in 1917; and the method of work was still largely through the investigations undertaken or the advice given by Committees.³ Naturally, the Ministry was not

² New Ministries Act; 7 and 8, George V., ch. 44, of 21, viii, 1917. For the details of the work and organization of the Ministry of Reconstruction, see the *Annual Report*.

³ The following is a list of the chief Committees which deal with industry and commerce: Old sub-Committees—Agricultural Policy, Coal Conservation,

concerned with industrial and commercial readjustment only. Problems of social amelioration, housing, education and the machinery of government, were also dealt with, but here we shall be concerned only with that part of the work which was affected by and which affected industrial adjustment in war, and after war to peace conditions. The cost of the Ministry of Reconstruction was given in an official statement of June 17, 1918 in the House of Commons, in comparison with certain other costs; but it must be understood that the cost includes expenses of members of Committees:

<i>Department</i>	<i>Total Staff</i>	<i>Total Annual Cost</i>
Ministry of Munitions.....	16,809	£2,775,179
War Office.....	16,100	2,206,533
Ministry of Labour.....	5,763	756,268
Board of Trade.....	4,800	780,000
Ministry of Reconstruction	112	24,935

THE MINISTRY OF RECONSTRUCTION

The Ministry of Reconstruction formed, as it were, an outlook post before hostilities ceased. It had no executive powers and it was, therefore, dependent upon the older departments both for the knowledge which past experience had given them and for the carrying out of any measures which could be adopted while the war lasted. Most of the executive departments, however, were too much absorbed with the work involved in war organization to devote much time to the preparation of post-war policy; and in any case the problems of peace needed to be seen from some central point of view. Coördination of the inquiries preliminary to action by the executive departments was therefore necessary; and to this the Ministry of Reconstruction added the advice and experience of those who were outside government offices and were intimately acquainted with finance, commerce and industry.

When, at the end of October, 1918, it was clear that hostilities

Acquisition of Land, Demobilization of the Army, Relation of Employers and Employed, Civil War Workers, Demobilization. New Committees—Chemical Trades after the War. New Industries in Engineering, Supply of Raw Materials, Trade Combinations and Trusts, Currency and Exchange, Financial Facilities for Trade, Financial Risks in the holding of Stocks, Raw Material for Building, Financial Assistance for Housing.

would soon cease, the Minister of Reconstruction was able to present a definite scheme for demobilization and other transition measures to the Government; and immediately after the Armistice was declared, Dr. Addison made an announcement in the House of Commons of the chief points in the policy which the Government had decided to adopt;⁴ and various official notices in the Press were issued.

That is the history of preparations for solving the problems of the readjustment of industry. We may now review the problems themselves in greater detail and explain the machinery which was at the disposal of the Government for dealing with them. Obviously it was impossible to foresee all the difficulties which have arisen and many of those which will undoubtedly arise in the near future. It was clearly impossible, for example, to foresee the suddenness with which the war would end. But on the whole, the general situation, as we now know it, was foreseen and the preparations made have proved to be useful.

EFFECTS OF WAR

In order to understand the problem, however, it is necessary to review first the adjustment of industry to war conditions and then to describe the readjustment for the transition from war to peace; for industry of January 1919 was very different from industry of 1914, and it was the difference which made most of the difficulties. The industrial problem became gradually more complicated as the war grew longer. In the later months of 1914, it may have been possible to think of a mere restoration of the old situation as soon as the war ended. But by the middle of 1915, it became obvious that the proportionate strength of different industries was changing, that new developments were occurring in some industries and that it would be quite impossible, even if it were desirable, to go back to the situation of August, 1914. The markets of the world had changed, the old transport routes were closed or very much modified, the majority of the goods produced were different, and a great part of the available labor of the world was under arms. It was expected that the financial system would collapse, that the world would starve and

⁴ Hansard, Commoit. November 13, 1918.

that the new situation could not last for more than three years. But an adjustment took place in the world at large and in the United Kingdom, until in 1918 the organization of life on a war basis seemed almost natural and great numbers had learned to take advantage of the changes which the new situation offered.

GOVERNMENT ACTION AFFECTING INDUSTRY

The changes in industry during the war may be distinguished into those which were due to Government action and those which were the consequences of the world situation. The latter began to operate in August, 1914, in regard to employment and this was the first obvious industrial problem which had to be dealt with. Shipping was dislocated, orders were cancelled, men left the works for service in the army and the general result was that works closed down and great numbers of men and women were unemployed. The general public appeared to be affected by the beginnings of panic in regard to foodstuffs and the common cry which was used to keep industry going was "Business as usual."

When the situation cleared somewhat, the cry was raised that we should take the opportunity to "Capture German trade"; and indeed it was obvious that the supply of the markets of the world was likely to be considerably modified by the naval situation. We need not, however, relate the victory of the industrial changes which immediately followed; for Government action in regard to industry soon became the most universal source of change.

The natural and non-administrative causes of industrial change were such as the diminished quantity of goods produced and the limited supply of transport. This began the general increase of prices which was speedily assisted by various methods of inflation. Hesitancy, uncertainty and a general ignorance of what the situation would be in the near future all caused industrial change; and none of these were directly due to governmental action. But social life is one system and it is perhaps too abstract to distinguish the natural from the administrative causes of industrial change. In any case we are here concerned only with the administrative Government action with regard to industry begun for the purpose of raising men for the army and increasing the supply of munitions. The first and ultimately the most important changes introduced had to do with "dilution" and Trade Union practices.

The immediate purpose was to increase the supply of labor for the metal and chemical trades and to make labor more "mobile." The increase of supply was to be obtained by the use, in engineering works chiefly, of women and unskilled men; and mobility was to be improved by removing the regulations by which the Trade Unions had hitherto preserved the interests of skilled men. The demand for soldiers and munition workers absorbed all unemployed, drew back into industry the older men who had retired, introduced boys and girls into industry before their normal time and, above all, caused a transfer from peace industries to war industries. This transfer was, naturally, due in part to other causes than Government action, as we have noted above; but the general result on employment may perhaps best be explained at this point. The following are approximate figures to show some of the changes which occurred:

Occupation	Men		Women	
	July, 1914	April, 1918	July, 1914	April, 1918
Building.....	920,000	450,000	7,000	27,000
Mines and Quarries.....	1,266,000	1,052,000	7,000	13,000
Metals.....	1,634,000	1,849,000	170,000	555,000
Chemicals.....	159,000	166,000	40,000	103,000
Textiles.....	625,000	425,000	863,000	844,000
Total Industries (including others).....	6,163,000	4,966,000	2,176,000	2,713,000
Agriculture.....	800,000	589,000	80,000	89,000
Transport.....	1,100,000	821,000	17,000	95,000
Total Occupations* (including others).....	10,606,000	8,210,000	3,276,000	4,808,000

* Shows an increase, excluding domestics, dressmakers, mercantile marine and a few others.

We may now look more closely into the nature of the Government action which partly effected these changes; and here the most prominent issue is that of the Government pledges in regard

to Trade Union practices. The customs and practices in regard to the amount of work to be done, the class of worker who was to operate a certain type of machine, and other such regulations enforced by the skilled Unions, restricted the output of war material. It has long been a tradition of employers that Trade Union customs and practices are restrictive; and output has long been the chief purpose to which employers of labor have devoted their minds. In the same sense, the shipowner usually regards regulations as to a load-line as restrictive; and he is more interested in the output of cargo than in the space for the crew. But all regulation can be regarded as restrictive from one point of view; and from the Trade Union point of view the restrictions were regulations aiming at reducing to order the chaos of the labor supply. The customs and practices were, therefore, believed to defend labor from exploitation and were to be supported on the same grounds as were the Factory Acts or the relevant parts of the Merchant Shipping Acts.

It was clear, however, that a fundamental difference in the *method* of regulation existed, in that Trade Union practices were enforced by the parties chiefly concerned and not by the State. The Government of the day accepted the idea that a larger output could most easily be obtained by the removal of all regulative restrictions on the use of labor; and the State led the way by withdrawing some of the prohibitions under the Factory Acts in regard to overtime, the labor of women and children and in regard to occupations hitherto classed as dangerous. Some of the reports of the factory inspectors indicate that employers often went further than was intended by the Home Office and paid no attention at all to the old regulations. But apart from the exaggerated devotion to output at all costs—to others (which is often held to be of the essence of good business management) there was a general feeling that the old preservation of health and life must be subordinated to the supreme national need. Industry was, therefore, considerably affected by the removal of the customary "inhibitions" and restrictions. The Home Office assisted in the negotiations leading up to various agreements between employers and employed in regard to pre-war customs. These agreements generally were to the effect that women might do work hitherto done by men; and this was agreed by Trade Unions in

the following among other trades—cotton, woollen, dyeing and bleaching, lace, wholesale clothing, gloves, boots and shoes, gold and silver, china, oil-seed, and baking. The terms of the agreements generally ran thus: "It is mutually agreed—that females may reasonably be employed upon certain operations hitherto ordinarily restricted to male labor—that this agreement is an emergency provision and shall have effect only during the continuance of the present war." It is clear, therefore, that so far as these "Home Office" agreements go, the parties do not depend upon any state action for the establishment or the abolition of substituted female labor. The effect, however, has been immense; and it cannot now be separated from the effect of changes in the munitions trades which were the direct results of Government action.

CHANGES IN TRADE UNION PRACTICES

Trade Union practices have been changed, united or abolished during the war in the munition trades as a result of: (1) the Treasury Agreements of March 19 and 25, 1915; (2) Pledges given by Mr. Lloyd George on June 23 and 28 and September 9, 1915, by Mr. Asquith on August 3, 1915, and by Mr. Montagu on August 15, 1915, each speaking for the Government; and (3) the Munitions Acts of 1915 and 1916. A preliminary agreement between the Engineering Employers Federation and many engineering Trades Unions is known as the Shells and Fuses Agreement of March 5, 1915; and this led the way to Government action in regard to engineering. The result was that women were substituted for men and unskilled for skilled men; processes were split up in order to be given to different types of workers; changes were made in methods of payment and hours of work; and the whole apprentice system was affected.

About 20,000 records of such changes are in the hands of some Trade Unions and of the Government and this hardly represents the actual number of changes made in the different engineering shops. But obviously the chief change has been in the substitution of female for male labor, or the "diluting" of skilled labor. Here, then, is an immense adjustment of industry in regard to labor, to which the Trade Unions concerned have agreed on the express and repeatedly emphasized condition that it is to last

only for the duration of the war. The readjustment to peace renders it necessary, therefore, to consider the whole question of Trade Union practices and particularly in the engineering industries.

Further changes during the war have been made through the Labor Department of the Ministry of Munitions. The mobility of labor from place to place was secured partly by the institution of War Munitions Volunteers and an attempt was made in the closing days of the war to regulate the supply of skilled men by a method which was unfortunately named an "embargo." But these do not constitute problems for the readjustment to peace since they are measures which had only ephemeral effects.

The Wages System was affected by the awards of the Committee on Production and by orders under the Munitions Act of 1917. In general it may be said that the change resulted in a form of compulsory arbitration during the war and the settlement of wage disputes by a Government Committee; further, the changes of rate were in the direction of raising the level of wages in most industrial occupations. The effect on the after-war problem is dealt with below; but here it may be said that (1) Government contracts made it easier to raise wages and (2) in some cases, as in Railways, the new rates of wages could not possibly be paid if the industry were to go back to its pre-war organization.

MATERIAL FOR INDUSTRY

In regard to material for industry, Government action increased the supply of steel, wood, leather and, latterly, foodstuffs. At the time when hostilities ceased material for munitions was controlled and distributed through the Ministry of Munitions, material for army clothing through the War Office Contracts Department and foodstuffs through the Ministry of Food. The control system may be reviewed under these heads.

After some preliminary action under the Defence of the Realm Acts, the Munitions of War Act of 1915 gave power to the Minister to take the whole output of any munitions factory or to take over and use such a factory. Under the same Act a special class of controlled establishments was arranged in which there was a limitation of profits to six-fifths of the pre-war standard. The whole of imported ores has been in the hands of the Ministry of

Munitions and the merchant, therefore, has been put aside during the war, in this matter as well as in regard to the contact between the maker of material and the user. Machinery and tools in engineering works have been rationed among the firms by the Ministry of Munitions; and the price given by the State has been based not on market conditions but on a "costings" system under which the firms were given what was deemed to be a "fair" profit. It will be understood, therefore, that there was considerable readjustment of those industries which supplied munitions of war; and even if on the termination of the war the engineering and chemical trades go back to their pre-war organization, the experience of the war and the experiments then made will not be forgotten. These experiments will probably continue to affect the industries in the future.

In regard to wool, the Government through the War Office Contracts Department purchased the whole of the Australian clip. This, with other special supplies, was used to provide army clothing for all the Allies and the residue was allocated for civilian use. The raw wool was actually owned by the British Government. The price was kept by purchase under large contracts lower than the general world-price and, therefore, the armies of the Allies were clothed more cheaply than they would otherwise have been. The manufacture of the woollen clothing, however, had also to be organized in order that the abnormal situation should not react unfavorably on the organization of the woollen industry. The industry is carried on chiefly in Yorkshire; it is highly organized there, both on the side of the employers and on that of the workers.

It was therefore found possible to set up, at Bradford, the Woollen Control Board consisting of eleven representatives of employers, eleven of Trade Unions and eleven of the State. This Control Board was attached to the War Office Contracts Department, but was an independent authority for the allocating of supplies of raw material to the different mills. And, in spite of the natural English opposition to Government interference, the Control Board appears to have proved itself satisfactory to those interested in the woollen industry. In its place at the cessation of hostilities a Wool Council was set up which is to carry on as long as necessary the supervision over the allocation of supplies

to the manufacturers. During the war about 93 per cent of the wool has been used for Government orders, and only 7 per cent has been left for civilian uses. This proportion will gradually be transformed as the armies are demobilized, but there has been no detailed announcement of the method by which the Government will put upon the market the wool of which it is still the owner.

The new Australian clip has already been purchased by the State; but it is uncertain whether the British clip will also be purchased and no one can yet foresee when free auctions of wool will again be possible. The policy of the Government is clearly to make as easy as possible the return to normal conditions of free private enterprise, without giving an undue advantage to any "interests" by abolishing at a stroke the war-time control.

In regard to leather, jute and flax the War Office Contracts Department have exercised a control of the same kind, but not so extensive. There have been large purchases of leather by the Government both in South and North America, for the manufacture of army boots. And leather, jute and flax have been rationed to the firms holding contracts for Government orders. The principle is in the main the same as that used in regard to wool; and it will be seen that the administrative action entirely depended upon the fact that the State was the purchaser and consumer of the finished articles. The operation of control in these cases, therefore, forms no precedent for the case of manufacture for private consumers.

Cotton, not being chiefly used for war purposes, was regulated not by the War Office but by the Board of Trade. A Cotton Control Board consisting of representatives of employers, of Trade Unionists and of the State regulated the distribution of supplies of raw cotton. In view of the shortage, only 60 per cent of the machinery was allowed to be used in each mill, except that more might be used on payment of a levy for a license. The money thus raised formed a fund for the supplementing of the wages of those whose work was diminished by the Order; and this has formed a basis for a possible future policy in regard to insurance by an industry against unemployment or under-employment.

CONTROL OF FOODS

Food and the raw material for foodstuffs are in a very unique position in regard to consumption for State Services and for private needs. Obviously, supplies of food for the armies of the Allies were as important as supplies of munitions. It was also necessary for the State that munition workers should have adequate food. But even in regard to civilian consumption, the State could not afford to be as disinterested as it might be, for example, with regard to the supply of lace or children's shoes. Although, therefore, the State Services were not the only nor even the chief users and consumers of foodstuffs, the State was compelled to take over in 1917 the whole control of the food supply. There were many changes of policy between the beginnings of panic in 1914 and the shortage and in maldistribution which led to the establishment of the Ministry of Food in 1916.⁶ Eventually the Food Controller issued Orders, enforced by about 1800 local committees which were appointed by the local authorities.

Under this system there has been governmental purchase in the world markets instead of private competition for imported supplies; there has been a costings system and examination of the books of firms, leading to Orders restricting prices and profits; and there has been control of flour mills and a reorganization of the whole distribution of foodstuffs. This has all been due to war shortage and war prices and may not affect readjustment problems; but it is obvious that the food supply trades will be for a long time affected by the results of control.

CONTROL OF TRANSPORTATION

Shipping had, latterly, at the end of the war, been under a requisition system; and all British ships were under control of a responsible Minister of Shipping. But it appears that no special problem of readjustment is likely to arise in the matter, since the disappearance of war dangers and war shortage may reduce policy to a mere removal of control.

Apart from special War-Time Ministries, the Board of Trade has exercised a considerable influence on industry through the control of railways and other land transport, petrol, coal, gas and electricity, cotton, timber, paper, tobacco and matches.

⁶New Ministries Act, Dec. 20, 1916.

The more important of these controls was obviously that affecting transport and power supply.

Considerable readjustment of industry occurred in regard to transport. Railways and canals were put under a unified control by the Railway Executive Committee, which was responsible to the Board of Trade; and there was a separate Executive Committee for the Irish railways. These Committees consisted of the managers of the chief railway Companies, who then organized on one plan the whole railway system. The receipts on the traffic of 1913 are guaranteed by the State to each Company. Passenger fares have been raised by 50 per cent at different dates; and the number of trains has been cut down. But immense quantities of troops and munitions have been carried without any detailed charge to the State.

COAL, EXPORTS AND IMPORTS

Coal-mining has been affected by the Coal Controller, under the Board of Trade. Action began by the attempt to restrict exports in May, 1915. Reorganization of coal distribution and the fixing of prices were then adopted and eventually the Board of Trade took possession of the South Wales mines in December, 1916, and of the rest in March, 1917, when the Controller was appointed. He regulated the production and distribution through the old management; and 95 per cent of profit in excess of the profits of the best two out of three years, or the best four out of six, before the war, were surrendered to the State. The result has been a raising of wages, and until the recruitment of miners in 1918 an increase of supply and an improvement in distribution. The Coal Mines Control Agreement (Confirmation) Act, 1918, continues the powers now exercised for six months after the war.

Trade has been affected also by the license of imports. The license has been a notice to the Customs authorities to allow the entry of goods, and although goods could be shipped they could not be delivered without a license. The Board of Trade and other Government Departments issued licenses for different articles; but here again readjustment to peace will mean little more than an abolition of war practices.

The Excess Profits Duty is another State measure of great importance to industry; but it is beside our point here to discuss it.

The problem for reconstruction is only whether the Duty has seriously diminished the supply of available capital for the necessary expenditure in meeting the new charges of the transition from war to peace.

The whole system of control within the United Kingdom is a part of the organization by which joint action was taken by the Allied Governments. And perhaps this inter-Ally control may eventually prove to be the greatest step forward which has been made during the war. Joint purchase by such bodies as the Wheat-Executive, joint organization of distribution under the Food Council, are important experiments in the adjustment of industry and commerce through state action; but the description of the inter-Ally organization is outside our present purview. It is sufficient to say that the Inter-Allied Maritime Transport Council controlled the use of all ships owned or chartered by the Allied Governments. This Council was assisted by Programme Committees for the different commodities; and on these Committees agreement was arrived at as to the needs of the different countries of the Alliance. The Maritime Transport Council and the Food Council were the two supreme bodies for the organization of joint action; and to each was attached a permanent Secretariat which forms the link with the executive officers of the several Governments.

The whole of international trade and commerce had been affected by the Blockade system, the Statutory list, the withdrawal of ocean shipping and the lack of commodities due to war; but the inter-Ally organization was able to provide and increase the supply of munitions, food and raw material; and the results are not likely to be forgotten. Announcements have already been made of an Economic Council, and of arrangements for joint action between the Allies in view of the problems of supply in the early days of peace. But this is a matter of international or world politics; and we must confine our attention here to the United Kingdom.

Such are the chief measures which affected the adjustment of industry to war. The industrial situation on November 11, 1918 in Great Britain was different from that of August, 1914, chiefly in the following particulars:

SUMMARY OF THE SITUATION ON NOVEMBER 11, 1918

(a) There were new Departments actually trading or directing manufacture and trade, such as the Ministry of Munitions, the Ministry of Food and the Ministry of Shipping.

(b) There were Control systems affecting manufacture and trade.

(1) Under the War office, for wool, jute, flax and leather.

(2) Under the Board of Trade, for timber, petrol, matches, tobacco and notably for coal and railways.

(c) Wages were high and so also was the cost of living.

(d) Certain industries held much labor, notably metals and chemicals, while certain others, as cotton, building, etc., had comparatively few.

(e) There were about one million more women in industry.

(f) There was practically no unemployment, except in so far as the coal shortage was causing the factories to slacken production

The new situation may be viewed from two angles. We may note either the effects on industry or the effects on the State; but clearly it is too soon to make any complete conclusions as to effects which may only be apparent after the confusion of war is over. Industry and commerce have been affected perhaps chiefly by the obvious advantage of centralized organization. In many trades new Associations and Federations have been formed; and undoubtedly State-control has promoted the pre-war tendencies to Combinations and Trusts. Even more fundamental results may be observed, although perhaps their true nature may not be agreed upon by Economists and Political Theorists. It seems, however, that serious disbelief has arisen in the old attitude of Economists who "explained" the rates of wages, the profits or the price of goods by reference to large and high-sounding principles. It is now more than suspected that wages and prices are the results of what in vulgar terms may be called "a try on." The whole system is seen to be empirical. Wage-earners get what they will take, and the whole economic structure is seen to be based upon political or social traditions and that acquiescence and docility which Lord Bryce said long ago was the foundation of the State. As for the State, the effect of its contact with industrial life was not, at the end of the war, to increase the love of it among the

general body of citizens. At one time both employers and employed were united in sentiment against governmental action. Nevertheless, public opinion has supported State action directed against any persons or groups who might make private gain from the political situation, and against the use for private ends of commodities needed for public work. "Profiteering" is a word now established and people are less inclined than before to resent such regulation as the prohibition of the use of petrol for pleasure or of building for luxury. All these somewhat intangible effects of the war adjustment of social life and industry will undoubtedly make a considerable difference to State action in the future. We may now turn to the reconstruction policy. The measures taken to assist in the readjustment of industry to peace conditions may be summarized under the three heads of labor, material and finance. The labor situation depends largely upon the transfer of workers from war-work to peace production and upon the order and rate of demobilization of men from the forces. Arrangements had been made for both of these; and following on the declaration of the Armistice, a succession of announcements were made in Parliament and the Press.

READJUSTMENT OF LABOR

Civilians. The principle adopted with regard to civilian war-workers was that of gradual discharge. First, those who did not depend for their living on the work they were doing were asked to withdraw from munition factories or were given notice of dismissal. Then the break clauses in the contracts for ammunition and some other war-material were put into operation; and contractors began to discharge workers. Women and disabled men seemed to the general public to be sufferers under this plan; and for a time there were protests and wild suggestions that the manufacture of munitions should be continued until other work was obtainable by those likely to be discharged. The Government policy was, however, clearly inevitable. It was unwise to use material needed for peace products in the manufacture of useless shells and bombs; and, further, there was not enough storage space for more ammunition when none was being shot away at the front.

Industry, however, was not ready to take over the workers released from the manufacture of munitions. General unemploy-

ment was, therefore, to be feared; and in fact great numbers of those discharged could find no new work. Hence it was that the universal free Unemployment Benefit was established for all workers who come under the National Health Insurance Act of 1911. Before the war about 2,292,000 men and women were insured against unemployment under the contributory scheme. That scheme was extended to cover about 1,140,000 more men and women by the Munitions of War Act, 1917; but there were at the end of the war about 10,000,000 workers uninsured against unemployment, and there was clearly no time to establish the administration of a contributory scheme.

It was, therefore, decided that the State should offer free unemployment benefit to all workers for thirteen weeks during a period of six months after November 25. The rate, after some readjustment, was 30 shillings a week for men and 25 shillings for women, with 6 shillings a week for the first dependent child and 3 shillings a week for every other dependent child. This was obviously a very much higher rate than the old 7 shillings and 6 pence per week; but the cost of living was great, wages were high and unemployment was affecting even the higher paid workers.

We need not, however, discuss here the effect on the workers. The reaction on industry is hardly yet known; but on the whole the policy has provided a "waiting time" during which machines can be refitted, prices can be readjusted to the new situation and peace production can begin. Unemployment Insurance is an administrative method used to ease the change over from war to peace. It is not essential perhaps in countries where industries have been less affected by war conditions than they have been in Great Britain; and it may be quite an inadequate method if the industries of a country have been too completely dislocated to revive of their own initiative. But in Great Britain it has been adopted as a partial solution of the transition problem in regard to labor.

The second problem of labor in regard to civilian war-workers is the problem of finding employments for them where they were actually wanted; for although many were unemployed, some employments were open. But the only machinery available for placing workers in employment was that of the Employment Exchanges. It was foreseen that the old system would be quite un-

able to bear the strain which would follow the war and therefore, (1) an Act was passed giving the Minister of Labor power to expand the premises and staff of the Exchanges, (2) special arrangements were made that the Army should release immediately all Employment Exchange officials and (3) a Controller General of Demobilization and Resettlement was appointed, under the Minister of Labor. The Department of the Controller General became responsible for the whole labor situation during the resettlement of workers in industry.

The Army. We may now turn to the demobilization of the forces since from our present point of view this also is a labor problem of the readjustment of industry. The Committee on the Demobilization of the Army began its work in the summer of 1916. It devised a plan on which the policy of the Government was eventually based in October, 1918. At first it was not clear whether demobilization should take place according to military units, age and length of service or the needs of industry; but the Committee decided that the Army must be demobilized in an order and in numbers dependent upon the industrial situation when the time came. An order of priority of occupations in view of public needs was therefore prepared. It was agreed that coal-miners and transport workers, for example, were to be demobilized before hairdressers or salesmen; and arrangements were therefore made to demobilize the men, in equal proportions from abroad and from the army at home, in accordance with their occupations. But before general demobilization could begin, clearly industry could not be readjusted unless men specially skilled to fit machines or specially trained as organizers and foremen were released from the Army. These men were called "pivotal" because the occupations of other workers turned upon their being in their places. Employers were, therefore, permitted to make lists of such men and to obtain their immediate release.

Unemployment. In view of possible unemployment among ex-soldiers, free Unemployment Benefit of the same kind as that applicable to civilians was offered to them. But the Unemployment Benefit was to date, not from November 25, but for six months from the day on which each soldier was demobilized. Furlough and war-service gratuities existed in addition; but these details hardly affect the industrial situation.

Wage Regulation. The wages problem left by the war was another preliminary problem of the transition. Wages in many occupations had risen considerably, and women's wages particularly were, in general, higher than they had been before the war. Prices also were high and it was agreed by many and believed by still more that the cost of living had risen much more than the rates of wages. In any case it was obvious that trouble would result if wages were lowered while prices remained the same. But it was clearly possible that, whereas during the war there was a shortage of labor, when munitions work ceased there might be a surplus of labor. Even if the situation were simply of this economic kind, the State would have been compelled to deal with it; but the additional problem existed that the State itself had maintained the higher rates of wages.

Awards of the Committee on Production and Orders under the Munitions Act had made it possible to enforce the payment of certain rates of wages for munitions work. These Awards and Orders had also affected the rates for work which was not munitions work. But if munitions work ceased, there would be no method of maintaining by law the existing wage rates; strikes would result from the effort to prevent a general fall in wages. Again the Munitions Act might cease to operate before any readjustment of wages had been agreed upon. For these reasons a Committee was appointed to consider what should be done in regard to wages under Awards and Orders; and the result was the speedy passing of the Wages (Temporary Regulation) Act of November 26, 1918.

By this Act it was made possible to enforce the payment of the wages generally prevailing on November 11, 1918, the day of the Armistice. A tribunal, of the same form as the Committee on Production, was established for judging the rates of wages and making any variations necessary. And it was made illegal for six months to vary the rate of wages except by agreement with the Trade Unions concerned.

It is not possible yet to pass judgment upon the results of the Wages Act. It was foreseen that, on the one hand, employers might be unable to pay the prevailing rates when Government contracts were withdrawn, more especially as during the war any increase of wages had been born by the Government in the price it

paid on its contracts. The new Act might, therefore, cause dismissals and unemployment.

But on the other hand it was believed by many that employers would be willing to pay well in order to have tranquility during the transition and that a high rate of wages would be more acceptable generally than uncertainty and fluctuations in the rates. Employers would be able to calculate their costs if they were certain of the rates of wages they would have to pay. And thus, in the readjustment of industry the State has had a considerable effect upon the situation in regard to wages.

A further preliminary problem of the transition, as may be imagined from what has been said above, was the restoration of Trade Union practices. It has been seen that the Government is pledged to restore these practices; and yet it is generally felt that industry has changed so much that they cannot be restored. It is said that the very machines and processes on which these practices have been based have disappeared. This, however, has been exaggerated. Nearly all the disappearance is due to the repetition work on shells and fuses; and the new machines and processes are not all permanent or useful for peace. But the problem of readjustment to peace does not lie there. The problem is not whether practices can be restored; it is whether the Trade Unions concerned shall or shall not regain the power with which they parted on receiving the Government's pledge and in the national interest. They once had the power to regulate the supply and distribution of labor; are they to regain it? If they are, they must be given the power to enforce the restoration of pre-war practices, as a basis for bartering. They must be able to restore even if they do not wish to do so in order that they shall have some say in the organization of labor in the new industrial situation. And undoubtedly the skilled Unions do not desire to put back the clock. They recognize the impossibility of a mere return to 1914; and they only desire to have power to substitute what they desire for that older situation. It became necessary, therefore, for the Government to prepare a Bill for the restoration of Trade Union practices which might be made a basis for an agreement between the employers and the workers concerned.

READJUSTMENT OF MATERIAL

In spite of all preparations for an orderly transference of workers from war occupations to peace industry, the crux of the situation was at one time the supply of material and machinery. In a highly industrialized society occupations depend upon much more subtle factors than in an agricultural or single society. The difficulties were foreseen. The Ministry of Munitions, as soon as hostilities ceased, began to issue permits to use material and tools hitherto controlled. The price of steel was kept under control in order that private firms might obtain enough at reasonable cost. But most of the metal supplies were at once freed.

The remaining problems were those of supply and allocation in the cases in which there was a shortage of material. As for supply, a Central Raw Materials Board, consisting of Cabinet Ministers, was appointed to deal, for the War Cabinet, with the securing of supplies. Through the Board of Trade and the Colonial Office, arrangements were made for the control by British interests of zinc concentrates and lead. A Government buyer of timber still continued to purchase abroad for the needs of peace, but the control of purchase of timber in England was removed.

As regards textiles, wool continued for the transition to be under the control we have already described and an arrangement was made for the export of jute from India only under license. Egyptian cotton was purchased by the Government, and the war arrangements with regard to American cotton are understood to be continued for the transition. Then, in regard to supply for the readjustment of industry from war to peace, the State acts as a purchaser in some cases of foreign material; and in some cases the State has made special arrangements for the control of supply to remain in British hands.

There remains the problem of distribution. Before hostilities ceased and while the position that would succeed was still obscure plans were made for carrying on in a modified form the control of raw material supply which had existed during the war. A Standing Council on Priority was established in connection with the Ministry of Reconstruction, which was to be the final authority under the Cabinet for the allocation of materials to the different industries. Each industry was to present a joint requisition to the Standing Council and the distribution of the material allocated

was to have been managed by the industries themselves, on the principle followed in regard to wool and cotton. Some valuable and important work was done by the Standing Council immediately upon the cessation of hostilities, but it soon became clear that tonnage and supplies were adequate for the operation of the normal trade machinery and State control and allocation were, therefore, soon discontinued.

The more permanent problems of readjustment are still unsolved. Committees have made recommendations on coal conservation and on electric power supply; but it is not a part of our present task to review suggestions. It appears that some action is being taken which may be preparatory to a large scheme of electric power supply for the whole of Great Britain; but the scheme is only at its initial stage. Experimental borings, with a view to developing mining resources, have begun near Lough Neagh in Ireland; but here again the action taken is hardly sufficient to warrant description in an account of industrial readjustment. The development of light railways in rural districts seems to be another of those schemes which may have a large future, but are at present indefinite.

The building trade was left by the war in a difficult position. There was a serious shortage of houses for the working classes, amounting to a need for about 500,000 houses in England, Wales and Scotland. Public and commercial buildings had not been erected during the war; and even repairs had been very inadequately done. But there was a smaller number of workers in the trade than in 1914; and there was a serious shortage of material—stone, brick and timber. For this reason the Ministry of Reconstruction set up the Central Building Industry Committee to deal with the reorganization and the needs of the building trades.

State assistance was recommended for the dye industry,⁷ and a Committee has been established to develop the scheme.⁸

The Engineering (New Industries) Committee has compiled a list of articles which were not made before the war in the United Kingdom or were made in insufficient quantity. This list and the Report of the Committee may be considered as examples of State assistance in the spreading of information; but no further State action in regard to engineering appears to be contemplated.

⁷ *Cd.* 9194.

⁸ See below Announcement of January 11, 1919.

Under the general heading of material we may consider the storage problems and the national factories. It was clear that industry and commerce, as soon as hostilities ceased, would need the storage space used during the war for war-material. The facilities for storage were essential to the movement of commercial products, and State property blocked the way. It became a part of reconstruction, therefore, to find space in warehouses and sheds. Ordnance and other stores were transferred from commercial warehouses to some of the largest national factories, notably those at Chilwell, Aintree and Georgetown; and the Port and Transit Committee have executive powers for disposing of storage space. In addition, when hostilities ceased, the State was owner of large quantities of stores and other property.

The Ministry of Reconstruction, therefore, carried on the Committee appointed to consider the problem of Government property, other than ships and factories. This led eventually to the establishment of an executive Surplus Government Property Disposal Board, which received all inventories and information collected by the Committee on the subject, and carried out the recommendation of the Committee by entering into negotiations and making contracts for the disposal of such property. Under this head come Army horses and mules, motor vehicles and agricultural stores; and the ultimate responsibility for all disposal of stores was given to the Ministry of Munitions which, it is presumed, will become a Ministry of Supply. The further problem remained as to the disposal of National Factories. The State, during the war, through the Ministry of Munitions, had expanded the engineering industry by building and equipping various factories. Some of these were hardly more than sheds, for shell-filling; others had the best and newest machinery for the making of such things as aeroplanes. Some were on ground owned by the State, others were closely connected with or even inside the grounds of private factories. Some were isolated; some were in vast groups, as at Gretna; and all were classed as National Factories.

This led to some misunderstanding among the public who happened to be interested and many schemes were suggested for the policy in regard to these factories. It might be possible, according to some, for the State to manage the factories for commercial production or for the supplies needed by the central

Government and the local Authorities. It might be possible to use some factories for research or for training or as educational establishments. On the other hand, strong influences were against the entry of the State into competition with private industry; and some factories had been built under contracts of transfer after the war. The details cannot be given here. But the whole position was received by the Ministry of Munitions and the factories were dealt with individually. The State has not adopted any policy of a general character which makes any striking departure from old practices; and therefore we may omit further description of the problem.

In regard to ships, the State owned about three hundred "Standard" ships of about 10,000 tons, at the cessation of hostilities. These were gradually disposed of to private owners by the Ministry of Shipping.

Agriculture may not be strictly an industry, but in the general readjustment of industrial life the occupations in rural districts were obviously important. They were investigated by a special Committee whose report has been published, and by a branch of the Ministry of Reconstruction; while, naturally, the Board of Agriculture continued its normal work. The result has been the Corn Production Act of 1917, fixing a guaranteed price for corn and establishing a Wages Board, with subordinate Local Boards, for fixing minimum wages in agriculture.

This will obviously result in a permanent change of the situation in rural districts. The Workers Union and the Agricultural Laborers Union are much stronger than they were; and if, as is expected, a certain number of ex-soldiers settle on the land, the position in rural districts may affect the whole of industrial life. It is suggested that the distribution of electrical power, under the new scheme elsewhere mentioned, would make alternative employments and small industries possible in country districts. But in general no action has been yet taken which we can class as readjustment.

Progress has been made with regard to forestry and an Interior Forestry authority has been established, which controls the expenditure of a grant of £100,000 for the training of experts and the making of surveys. A large scheme for the development of forestry in the United Kingdom is foreshadowed.

THE READJUSTMENT OF FINANCE

The great difficulty of readjustment in many cases of private firms was that either orders were not forthcoming or there was not enough money in hand to begin the current expenses of manufacture. The cotton trade, for example, was held up from an immediate return to its peace production by the uncertainty of markets in the East. And the public at large, as well as the retailers, were inclined to wait for prices to drop. On the other hand the large Government contracts during the war had accustomed many manufacturers to expect Government assistance, even of a financial kind; and the problem was much canvassed whether the State should assist financially in the re-starting of private industries.

The Committee of the Ministry of Reconstruction on financial problems dealt with very wide problems of exchange and currency and it was recommended that the effective restoration of the gold standard should take place as soon as possible.⁹ The effects of the Excess Profit Duty were also considered; but in all these matters, although investigation was made and close communication with the business world was maintained, no State action took place which can be regarded as having affected the readjustment of industry.

JOINT INDUSTRIAL COUNCILS

The action of which we have so far spoken has been in view of emergency problems of the transition. Unemployment Benefit and Resettlement are urgent post-war problems, but they are transitory; and the readjustment of industry, if it is to be at all effective, must be the result of more fundamental changes. The situation of 1914 could not be restored by any means; but the new situation would not be better, unless some effort were made. And this was the reason why the old Reconstruction Committee and the Ministry of Reconstruction devised what are now known as Industrial Councils. This has made a change in the general situation; and perhaps the other large change affecting industrial life is the creation of the new Department of Overseas Trade.

We omit, for our present purpose, changes of a non-administrative character and changes which have had a non-governmental

⁹ *Cd.* 9182 and *Cd.* 9227.

source such as the new federations and associations of employers and the new movement among the workers such as the Shop Rewards movement.

In the administrative sphere the readjustment of industry as regards permanent policy may be summarized under the heads of Industrial Councils and Overseas Trade. Industrial Councils have been already formed for the following industries: Baking, bedsteads, bobbin-making, chemicals, china clay, furniture-making, gold, silver and jewelry, hosiery, leather goods, watches, paint and varnish, pottery, rubber, saw milling, silk, vehicle building. In each of these industries representatives of employers and workers are consulting together on points of general interest to the industry. This may not be a revolution. It may come to nothing. But it may, on the other hand, be a beginning of a new organization of industrial life; and in any case it is becoming more possible to forestall disputes and to allow the workers a share in the control of working conditions.

In addition to the Industrial Councils already formed, there are many conferences and committees aiming at the formation of new Industrial Councils and even in those industries such as engineering and railways, in which there is no immediate prospect of a joint Council, the same movement is making itself felt. The formation of all joint Industrial Councils is voluntary and the Government does not use any pressure; but the duty of supervising and assisting, when required, is given to the Ministry of Labor. A section of that Ministry keeps in touch with the industries in view of the possibility of Joint Industrial Councils.

The Council of an industry is a national body; but generally there are also District Councils, subordinate to the National Council; and in a special relation to both stand Works Committees, which are part of the whole structure of the new organization. A valuable report on Works Committees has been published by the Ministry of Labor; and a parallel movement in the United States Army seems to have resulted in the formation of Committees in the works of the Bethlehem Steel Corporation. The idea is an old one; and it is not eventually connected with Joint Industrial Councils. But it forms a part of the permanent readjustment of industrial relations and with this the State is very much concerned; for on a Works Committee the workers gain control of

their working day, they may control dismissals and they have a very real training in self-government. Industrial autocracy is, therefore, passing; and its passing will strengthen political democracy.

The departmental history of the idea of Joint Industrial Councils is interesting, chiefly because it is part of the general preparation for post-war problems. A sub-Committee of the Reconstruction Committee continued under the Ministry of Reconstruction was appointed to consider the relations of employers and employed. Mr. Whitley, the Deputy Speaker of the House of Commons, was chairman; and the sub-Committee contained representative employers and workers. This body suggested the formation of Joint Industrial Councils to perform such functions as the following:

(i) The better utilization of the practical knowledge and experience of the workpeople.

(ii) Means for securing to the workpeople a greater share in and responsibility for the determination and observance of the conditions under which their work is carried on.

(iii) The settlement of the general principles governing the conditions of employment, including the methods of fixing, paying, and readjusting wages, having regard to the need for securing to the workpeople a share in the increased prosperity of the industry.

(iv) The establishment of regular methods of negotiation for issues arising between employers and workpeople, with a view both to the prevention of differences, and to their better adjustment when they appear.

(v) Means of ensuring to the workpeople the greatest possible security of earnings and employment, without undue restriction upon change of occupation or employer.

(vi) Methods of fixing and adjusting earnings, piecework prices, etc., and of dealing with the many difficulties which arise with regard to the method and amount of payment apart from the fixing of general standard rates, which are already covered by paragraph (iii).

(vii) Technical education and training.

(viii) Industrial research and the full utilization of its results.

(ix) The provision of facilities for the full consideration and utilization of inventions and improvement designed by workpeople, and for the adequate safeguarding of the rights of the designers of such improvements.

(x) Improvements of processes, machinery and organization and appropriate questions relating to management and the examination of industrial experiments, with special reference to coöperation in carrying new ideas into effect and full consideration of the workpeople's point of view in relation to them.

(xi) Proposed legislation affecting the industry.

The Government accepted the recommendations of the Whitley Committee, and gave to the Ministry of Labor the task of following up the policy suggested. Thus the Ministry of Reconstruction was able, while the war continued, to begin the reorganization of industry in view of post-war problems.

THE DEPARTMENT OF OVERSEAS TRADE.

The other change which may affect industry more permanently is the creation of the Department of Overseas Trade. This was the result of reports on the relation of our diplomatic and consular services abroad in connection with our Board of Trade organization at home.¹⁰ It is intended that the State, through the new department, shall more actively assist the foreign trade of the country. And this, although not a revolutionary change, has done something towards the readjustment of British industry to meet the needs of the after-war situation.

FUTURE RELATION OF GOVERNMENT TO INDUSTRY

These changes must be regarded simply as examples of what is being done for the readjustment of industry from war to peace, in so far as that readjustment is connected with administrative action. Obviously there are many movements occurring outside the purview of the Government which may make an even greater difference to future industry and commerce than any action of a political kind. And still more obviously there are many issues of a political kind still undecided, in regard to tariffs, essential industries, State manufacture, nationalization and State control. But we have omitted the discussion of suggestions and programs not yet accepted by the Government. Our subject has been largely historical. It is a record of accomplished fact; and the value of what has been done will be more easily estimated when the transition from war to peace has been accomplished.

But it seems clear that in the United Kingdom the preparation of policy is now regarded as essential to government and that it is now regarded as natural to prepare beforehand for future problems of peace as states have always prepared for war.¹¹ We have

¹⁰ Cd. 8815; 8715 and 8181, on the Reorganization of Commercial Intelligence Services.

¹¹ Cf. the valuable report on the Machinery of Government, Cd. 9230.

become much more conscious than before of the working of those economic forces on which depends the supply of our food and clothing; and we are much less willing than before to acquiesce in the method or want of method which we have inherited from our grandfathers.

It is difficult to make any adequate general statements as to the policy pursued either in the industrial adjustment to war conditions or in the readjustment to peace. The first and most striking point which can be made is that there was practically no preparation for the immense changes which the war caused in industry. It was inevitable that no preparation should have been made; for no one had imagined that the possible war of the future would be so far-reaching in its effects. But the result was that the adjustment of industry was irregular, often inconsistent in its parts, and above all—opportunistic.

Particularly in regard to the production of munitions, the action of the State depended rather upon separate solutions of difficulties as they arose than upon a consistent policy. But this does not imply adverse criticism of what was done; for it is impossible to conceive of a policy which could have been designed beforehand to meet the situation of 1916 and 1917. On the other hand, an attempt has been made to prepare industry for the readjustment to peace. We had the peace situation of 1914 as a definite starting-point for calculation and we could foresee some of the larger problems that would arise when hostilities ceased.

In the second place it may tentatively be suggested that State action in regard to the readjustment of industry to peace conditions follows the English precedent of the removal of the State from the industrial and commercial field. In a sense we are going back to August, 1914; that is to say, we are to depend on non-governmental organization for the supply of food, clothing and common services.

State socialism will not result from the war, at least in England. Indeed the experience of State action during the war has resulted in a very general suspicion of, and even hostility to officials. But opinion is the basis of government. The readjustment of industry will, therefore, mean a withdrawal of the State into a prescribed circle of activities; and on the other hand government

by business men will cease to be accepted, as the sphere of political organization becomes more distinct from that of commercial and financial activities.

Thirdly, although the State withdraws from the industrial field it will not, therefore, become less powerful. There is a general feeling that the State can do very much more than it has done in the past. The State may not manufacture or sell goods, but it may control much more completely than before the conditions under which goods are produced and distributed. In considering the readjustment of industry we must allow for this. The alteration to state socialism or state ownership is not necessarily "go as you please."

Nor is the State concerned only with punishing crimes or correcting abuses which have already arisen. Common opinion will certainly support supervision, prevention and direction on the part of the State; and, therefore, in the readjustment of industry there will be a forestalling of possible abuses by State action in regard to the length of the working-day, holidays, dangerous trades, workshop control, and even perhaps the limitation of profits and the control of trusts and combines. But all this is hypothetical. A tendency and nothing more at present exists in this regard. No definite actions can be cited. It is, however, obvious that among the soldiers as well as among the civil population there is a strong feeling that we should not go back to the industrial conditions of 1914.

Fourthly, the State has made considerable advances during the war in the organization of joint action with other states. Inter-allied controls may, indeed, disappear as soon as the normal operation of economic forces is restored; but what has been learned cannot altogether be lost. We omit here to discuss non-industrial or non-economic joint action; but in so far as inter-allied joint action has affected supply and distribution, it is clear that a new stage has been reached in political development. The traditional belief of theorists appears to have been that economic forces might be either state controlled or "free."

But quite obviously these two are not the only possibilities which exist. There might be a dangerous control by great interests, which are often operative outside and across the frontiers of any one state; and indeed a certain amount of such control

exists in normal times and has renewed growth in times of war. It is against this, and not against "freedom," that inter-state control is directed. During the war joint purchase, and an allocation of tonnage and supplies on joint agreement have been proved possible; and doubtless for the readjustment to peace, if any danger similar to those of war are encountered, the same kind of inter-state organization will be used. Indeed an adaptation of such organization to the needs of the transition has already been achieved.

Finally, the readjustment of industry to peace conditions is only a part of the whole problem which has been called the problem of reconstruction. Political progress does not necessarily take place only by slow accretions. There may be sudden imitations of social structure; and even habits and customs may, in certain crises, change suddenly.

A crisis appears now to be imminent. Violent changes have already occurred in certain countries; and undoubtedly the peoples of the world expect more than a mere restoration of the pre-war situation. But the policy which seems most likely to be progressive will allow for the fact that it is impossible to transform the whole basis of economic and social structure during a time of transition. The problems of the transition will have to be dealt with as ephemeral; and yet the method used should not prejudice the possibilities of larger and more radical measures of reform and reconstruction when we approach the task of organizing on a permanent basis the happiness of the peoples and the peace of the whole world.

Humanizing Industry

By IRVING FISHER

Yale University

THE war revealed great industrial discontent in our country, and our consequent weakness in time of stress and emergency. Lack of loyalty and lukewarmness of patriotism appeared more common among the industrial workers than elsewhere. The I. W. W. we regarded as distinctly disloyal. For their disloyalty some of us simply blamed them, or possibly put the blame upon German agents. The actual fact is, however, that the war only revealed, and Germany took advantage of, a dangerous weakness which already existed. Any propaganda among the I. W. W. simply indicated the cunning of Germany in finding the weak spot in our armor.

The fault of the I. W. W. is not primarily with its members, but with our existing social and industrial system. There is something radically wrong, of which the I. W. W. is a symptom. We must try to get an understanding of this, not stop at mere blame of its victims.

The extent of industrial unrest will be further discovered, and the discontent will be aggravated now with the sudden reversion to peace and the demobilizing of the army. The experience of Canada, for instance, has already shown that returned soldiers are not good workers because they are not satisfied with their old humdrum existence after their exciting adventures abroad. Ninety per cent of them, it has been asserted, are discontented.

Organized labor has the right to say here, as it is already saying in England: "We have done our bit and served our country. What is our country going to do for us?" And this is a pertinent question.

The German Government did everything for the workingman *before* the war. Therefore, when the war came the laborer felt that he owed his country something. He was willing, in return, to make sacrifices for his country. That was his attitude subconsciously, at least, even if not reasoned out. It is upon this subconscious sense of gratitude that patriotism and morale are

always, in the last analysis, dependent. Now the people of Germany understand the situation and a complete breakdown of morale is the result.

There are great changes necessary and imminent in bringing which, I believe, we should coöperate with the workingman. It will not be mere increase of wages and reduction of hours, though these reforms are the two things stressed in the demands of the labor unions. These needs have constituted the "labor problem" in the minds of most of us, but they will, I believe, largely take care of themselves,—at least, with the help of the labor unions.

There is a more fundamental reform upon which they are, to a great degree, dependent. Christ stated a great industrial truth when he said, "Man shall not live by bread alone."

WAGES DEPENDENT ON HEALTH

Of the many rights which the workman has heretofore only partially enjoyed, the greatest is the right to healthful conditions. Many do not recognize the importance of this right, but a few labor leaders, like Arthur Holder, are giving it more attention as a great factor in industrial success. Health is the workingman's capital, his only important asset. The man with money, the capitalist, does not need health as a means of making a living. If he falls ill, he can "live on his money." But if the laboring man loses his health, he loses the power to earn his living. His wages, which we consider so all-important, are dependent on his health.

Some people say that if his wages were raised, his health would be improved. This is doubtless true, but it is still truer that if his health were improved, his wages would be increased. To improve slightly an individual's health will not necessarily, it is true, nor always, increase that individual's wages; but if we increase, even slightly, the health, and thereby the working power of the nation as a whole, the general wage level will rise. In the last analysis wages depend on productive power, and the workingman's power to produce is dependent on his muscle and brain, i.e., his health.

A good illustration of this truth is to be found in the story of the hookworm disease in the South. The hookworm is called the germ of laziness. It produces anemia and saps energy. The

Rockefeller Hookworm Commission, by an expenditure of about 65 cents per capita, cured the disease by wholesale and made the Southern poor-whites once more into working citizens. With regained health, a worker could produce, at the least, enough to make every day a 100 per cent return on the 65 cents invested in his health!

Great returns are to be had from investments by employers in factory sanitation, lighting, and ventilation; and by the workingman in better and better selected food, housing, clothing, sports, amusements and books on health; and by the state in hospitals, sanatoria, dispensaries, health departments, health insurance, factory inspection, labor legislation, school hygiene, recreation, etc.

The workingman should have not only physical health but also mental health. Mental health depends on the satisfaction of certain fundamental instincts. If these major instincts are not fairly well satisfied, our lives will be failures, ending in the insane asylum or penitentiary. A human being whose instincts are balked becomes an enemy of society. This is the real reason for the I. W. W., as was emphasized by Prof. Carleton H. Parker, of the University of Washington, who, by personal contact and deep insight, probably knew more about that much discussed organization than any one else. The members of the I. W. W. were, he saw, not innately anti-social, but became so because they had individual initiative and a will of their own, and refused to conform, like the ordinary workman, to the Procrustean bed of industry today. They rebelled, like the small boys of a large city without playgrounds who break windows for excitement. When boys become so destructive, we give them, not a jail sentence, but a place to play; or at any rate the Juvenile Court recognizes that the delinquency is simply a miscarriage of the boys' legitimate instincts.

The I. W. W. workman is the naughty boy of industry. We have not given him the outlet which he must have. The very energy which breaks through and makes him destructive would, if enlisted for constructive work, have made him a more useful workman than his more docile and less energetic brother. It may be too late to reclaim him now, but we can at least prevent the making of more of his kind.

MAJOR INSTINCTS IN THE WORKMAN'S LIFE

I shall name seven major instincts which apparently must be satisfied to make a normal life. First, there is the instinct of self-preservation. The securing of a living wage must always be the first concern of a workingman. This has always been recognized as basic, and I need not therefore dilate upon it. Furthermore, self-preservation demands the maintenance of healthy working conditions, the prevention of over-fatigue and the provision of safety devices. No man can do his work well if he feels that it is fitting him only for the scrap heap. Finally, every employe should be assured of a steady job so long as he does his part. If he has to be "laid off" without any fault of his own, he should have due notice or a suitable dismissal wage. Fear of unemployment dissipates energy.

Secondly, there is the instinct of self-expression, or workmanship. Until modern industry contrives to satisfy this instinct in the ordinary workman, our labor problem will not be solved. I shall consider this below in greater detail.

Thirdly, there is the instinct of self-respect. Unless the workman is made to feel that "A man's a man, for a' that," he will be our enemy, will cherish a grievance, and will become anti-social.

The employer should, so far as possible, use praise for incentive rather than blame. If it is really necessary to call a man down, the rebuke need not be administered before his fellow-workers. The workman should be considered trustworthy until he has proved himself untrustworthy. Rivalry in production involves the satisfaction of the instinct of self-respect.

Fourthly, there is the instinct of loyalty. The universality of this instinct is strikingly illustrated in this war. Devotion to a cause, sacrifice for this cause, heroism if you like, have been shown by soldiers whose whole training has been one of monotonous industry. The instinct of loyalty should be satisfied in industry, as it is in the trenches. The employer often misses a great opportunity to be his workingmen's hero or honored general instead of their task master.

If the men can organize, a team spirit will develop. Collective bargaining and other forms of control of the industry by the men will forestall useless "knocking" and discontent and will develop loyalty instead. Mass activities, group singing, marching in a

parade, wearing a button or cheering a baseball team will develop and foster a united feeling.

Pride is an important constituent of loyalty. Workers have a right to expect that their plant is one worth being proud of. Fundamentally, loyalty is based on justice and mutual consideration. The employer who can best put himself in the place of his men best secures their loyalty. Extra work or overtime can, by loyal workmen, be "volunteered" with pleasure where "conscription" might arouse ill-feeling.

The great instinct of love, or of home-making, is a fifth instinct, and one vital for society. The homeless, migratory I. W. W. is an example of what occurs when life is deprived of its satisfaction. A man thinks of his own family as part of himself. His success means their happiness. Any action on the employer's part which affects family welfare immediately arouses resentment. The unrest caused by inability to enjoy family life or by bad instinctive life outside the plant is demoralizing. In a word, conditions of employment should, in every way, conduce to a happy family life.

The workingman's instinct of worship, if we may properly speak of such a faculty as a sixth instinct, hungers and thirsts for righteousness and often is not filled. If his daily work appeals to his whole nature and not merely to a portion of it, the task will be exalted to become really a part of his religion. No man should have to do work which is degrading or which will tend to crush idealism or warp the spirit of humanity and service.

Finally, the play impulse must be satisfied to produce mental health. The saying, "All work and no play makes Jack a dull boy," is true of the laboring man.

Some instincts are almost inevitably repressed, and, deprived of a wise outlet, are in danger of an unrestrained outburst. Play provides a safety valve. This play should not be frivolity, still less dissipation, but entertainment which will develop physical and mental health and a broadened outlook on life. A long workday makes proper play impossible, and is largely responsible for a man's resort to drink and other perversions of play.

Of the seven mentioned, only the instinct of self-preservation is even fairly well satisfied by the majority of workers. We thrum too continually on this one string. Human nature is a harp of many strings. We must use the rest of the octave.

THE INSTINCT OF WORKMANSHIP

The instinct of workmanship has been all but crowded out. So gradual and subtle has been the change that we do not recognize it until we suddenly note the contrast. Like the art of making iridescent glass which, since the iridescence was due to imperfections in the process of glass making, was lost without the loss being realized as that process was gradually perfected, so the instinct of workmanship has been dropped out by the very perfection of modern industry. While attending so closely to the product, we have forgotten the psychology of the producer. While making one man perfect in one point and another in another point, we have sacrificed the satisfaction of both. The monotonous nature of the work, and the fact that the workman does not see his product, are the characteristics of modern industry which cripple the effort that instinct could put into the work, and which are responsible for the dissatisfaction and unrest. Get rid of them, and the main (though not the only) obstacle to industrial peace will be gone.

In modern industry, individuality is lost,—each man's work is thrown in a common pool. In former days, the cobbler made the pair of shoes and watched their progress, inquiring of the wearer, "How do they wear today?" The artist similarly has the joy of self-expression and creation in his picture.

Text-books of economics today make the statement that the motive for work is money-making, with the exception that artists and scientists work for the joy that their work gives them. There is no greater fallacy than to make this contrast. The workman has this same power, though latent, of enjoying self-expression in his work. Our usual acceptance of this fallacy shows how far we are off the track.

President Eliot of Harvard once spoke in Boston on the joy of work. The next week a labor leader in the same hall spoke with a scornful laugh of the "high brow's" reference to such "joy" and the crowd of workingmen present approvingly joined in his ridicule. This incident is pathetic evidence that joy of work is too often conspicuous by its absence. When I first became conscious of this fact, I was loath to publish my opinions. I was not sufficiently experienced in the field either as laborer or employer. I wanted to wait until I could see the ideas tested.

In the last year Miss Marot's book "The Creative Impulse in Industry," and Ordway Tead's on "The Instincts in Industry," have given expression to substantially these same conclusions. From still another angle Carleton H. Parker had reached similar views. The strongest evidence of their truth, however, is the experience of Robert B. Wolf, who has applied them in the practical management of a paper pulp factory.

What did Wolf do? He introduced into his mill a system of record-charts by which each individual workman could see what his contribution to the product was. Just as in baseball, we are interested in the score; and just as in school, students find grades an incentive, so the workmen were stimulated by having and making a record. The curves and charts which Wolf devised gave an opportunity for such expression as the artist or handicraftsman enjoys.

Before Wolf came to the mill, where he tried out these ideas, there used to be discontent. On his arrival as manager, there was a strike on, and pickets surrounding the yards. The mill owner told him to get that energy that was called out by the strike into the making of wood-pulp. In strikes, as in the trenches, there is the satisfaction of the instincts.

At first antagonistic to Wolf's innovations, the men soon saw the "new game" and in striving to excel in it, found a constructive outlet for the impulses that had previously gone into destructive channels. They no longer have to make trouble in order to have the feeling of "something doing." Discontent is gone. It has sometimes been necessary to change a man's work, but almost never to discharge a man for inefficiency. The tendency of letting men slip into dead-end jobs is overcome. Mentally and physically each man is suited to his job. Promotions and the development of all-round ability are encouraged. The work becomes educative, as the workman, watching his progress, masters the process until he can himself invent improvements in the technique.

I have sometimes illustrated the fact that employes need other than monetary inducements, in this way: Suppose President Wilson, as General Pershing's employer, had said to the General when he called him to the White House before sending him overseas:

"Now, Pershing, you are going to do a job for me. I want it well done. I know you will shirk if you have a chance. I therefore want to hitch up your interests with mine. Your pay will depend on your victories. I'll pay you a bonus for every German killed and another for every German taken prisoner. I'll pay you also for overtime beyond eight hours a day."

How would General Pershing reply to such "inducements," especially when put forward as though President Wilson assumed that he could not be expected to feel any other motive than the mercenary one? Would he not have replied:

"Here is my resignation, Mr. President. You have insulted me. What do you take me for? Of course a man must live, but money is the last thing I am thinking of now. I want to fight for my country, for you, for our ideals, for glory, and for the satisfaction of expressing whatever is in me of military genius."

An objector might say, "But Pershing is a general, an artist in his line, an exceptional man." Were not the common soldiers under him fighting with the same motives? And were they not the very same men who were formerly in shops working merely for pay? The army affords the most supreme illustration of men motivated by entirely different instincts than simply self-preservation or "making a living." Instincts which had been repressed or dormant up to this point in their lives were found far more powerful in these workmen soldiers than the instinct of making a living. When, as ex-soldiers, they come back to be workmen again they will unconsciously miss something and unless it is supplied them, there will be trouble. We must satisfy their higher instincts. The employer must see in the workman his brother man, of the same flesh and blood, with the same soul-hunger, needing the same soul-food to satisfy it.

The Labor Aspect of Reconstruction

By CLARENCE M. WOOLLEY

War Trade Board

FOR nearly two years the mind and muscle of America have been dedicated to war, but the dominant note rising above the clash of combat has been unselfishness. The desire to serve has been the usual, not the exceptional, attitude.

Our participation in the war represents an altruism rarely manifested by nations; however, this devotion to the well-being of others is not expended alone on far away objects but continues to be demonstrated in every phase of our social and industrial life. Out of this experience has arisen a finer sentiment of human relationship, a realization of the interests that are common to all mankind, and a sense of responsibility to each of those who make up the nation.

Men of business engrossed in their particular objects seldom find occasion to voice the idealism which they express in their work. In a true sense, the idealist is practical in that his vision permits him to make use of realities sooner than the man who pursues material advantage so closely that he dare not raise his eyes from the ground to catch a glimpse of a newer and better world. At no other time have we so much needed this spirit or desire to look out upon the distant horizon.

The crisp sentence uttered some months ago with respect to making the world safe for democracy has caught the popular ear and conquered the imagination of all men, and is the symbol of that force which will make for an advancing civilization. Consciously or unconsciously the world has revalued its commodities. At the same time it has revalued the human asset. In this process of appraisal our attention has been attracted more by material than by spiritual considerations. All right-thinking men would be pleased to see these new values permanently replace the old standards. It is well-nigh certain, however, that material valuations cannot be stabilized until the social valuations have been tangibly expressed in the policy of those who are called upon to direct the larger affairs of the country.

PRE-WAR PROGRESS FOR THE BETTERMENT OF WORKERS

In striving to improve present conditions we should not close our eyes to the progress already made. The decade preceding the war was rife with censure and criticism of large scale industrial operations, but during that period, unknown to the critic or to the public in general, the progress involved in this economic movement made for the betterment of the worker in the same degree that it gave security and advantage to investments. Information has not kept pace with reformation; not only had this process been associated with substantial increases in wages but there had been evolved by many of the larger corporations employment departments which contributed to the well-being and security of the men. The desire to accord just treatment and to protect them against the petty tyranny of the oldtime boss, transferred the employment process from the shop foreman to the trained and sympathetic specialist, who was the only authority empowered to discharge as well as to employ. This assured fair treatment when disputes arose. The employment official gave to each worker a hearing and before the final act of dismissal was consummated not only the facts but the equities involved had become the deciding factor. If it were found that a man had been assigned to work for which he was inept, he was offered an opportunity to make good in some other capacity.

This method gave to each worker the assurance of steady employment so long as he performed his task with reasonable skill and diligence. His term of service was not dependent upon the caprice of his immediate superior. It fostered in the mind of the worker a conviction of justice and security. Aside from the fundamental feature of hiring and discharging, the employment department contained medical, dental and first-aid subdivisions, to which the worker had ready access and where he was assured of sympathetic and helpful attention.

The welfare work in this connection was not confined to the activities described but reached out to the homes of the workers. If a man did not report for work in the morning, a messenger was promptly despatched to his home to ascertain the facts which prevented his appearance. If he were detained by illness, or if his wife or children were sick, the report was brought back to the employment department, and the medical director visited the

home to ascertain the need for assistance, which was promptly accorded. If the worker were overcome by sickness which required a change of surroundings, some of the larger industrial institutions have equipped themselves with sanitariums to which free access is offered for employes, and where they are gratuitously maintained.

At first glance it might be inferred that the worker would resent such attention, but experience has overwhelmingly proved that where there is no desire to be inquisitorial or dictatorial he appreciates such service, for with it go sympathy and a genuine desire to recognize the mutuality of interest inherent in the relations of employer and employe. While there is a return to the employer in such procedure, the advantage to the employe is relatively greater.

This system inculcates a better knowledge of hygiene and assists in developing a stronger and healthier people. It also decreases the amount of dependency which otherwise would fall upon state and municipal institutions. The practical test as to the wisdom of this plan has been made during the war period, in that those companies which follow approximately the course we have briefly outlined, found that their labor turnover was extremely moderate in the face of an enormous turnover where such measures were not adopted.

Then, too, some fifteen years ago, the process of creating a proprietary interest in the minds of the workers was carefully studied and definite plans for its realization were put into effect by many of the more advanced corporations of the country. The workers have been encouraged and assisted to acquire a stock interest in the employing company. In one company which has been called to our attention the employes own 30 per cent of the stock.

It is impossible, even if it were desirable, to go back to primitive methods of handwork, but it is desirable to retain the mental attitude which attended the workman who, in his own house, and working with his own tools, turned out a finished product from material purchased or produced by himself. The acquisition of shares of stock by the workman has been found to restore in some measure at least the mental attitude of the oldtime hand-worker. The foregoing plans were evolved gradually, just as all enduring steps of progress have been taken.

SHALL THE EXISTING SCALE OF WAGES BE MAINTAINED?

At this time no greater problem presents itself for solution than that of wages. We are face to face with the question of whether or not the existing scale of wages shall be maintained. The world has made a new appraisalment of its assets, and if I am not mistaken, the valuation of the individual will continue to be represented in larger terms. The revaluation of the individual has largely determined the new value of commodities.

Statistics will show to a nicety the value of our lands, our mines and our shops, but we would search long to find a rule for the appraisalment of the man power of the country. If the new valuation placed upon labor is maintained, the value of commodities must likewise remain on a higher level. The measure of inflation in commodity prices is not so great as it otherwise would seem.

Prior to the war, wages in this country as compared to those which were current in European countries were approximately 80 per cent to 100 per cent higher. The scale of wages now is approximately 50 per cent higher. If the United States could prosper and develop under the former condition of relative wages it would seem to be certain that it can likewise prosper under the present differential. This involves the assumption that the ingenuity and ability of American manufacturers can maintain the same superiority with respect to shop organization and mechanical methods to permit of an increased output per man, while it is certain that the supply of raw materials in the United States will continue to give this country an advantage over all others.

The largest corporation in the world has already announced a reduction in the price of its commodities with the assurance that it will not reduce wages. This, for the moment at least, reflects the attitude of large scale business throughout the country.

It is true that wages in certain special war work were abnormally inflated due to overtime, but such inflation can, without difficulty, be corrected by the abandonment of the overtime feature. Those industries which have operated on a conservative and permanent basis have on the average increased wages approximately 100 per cent, and it is this phase of the wage problem to which attention is now directed.

There never has been a time when the business men of the

United States were more favorably disposed towards a larger distribution of labor. Hence the sentiment is quite universal that the present level of wages should be maintained. Whether or not this can be accomplished depends upon a myriad of factors which it is beyond the purpose of this paper to discuss. In any event wages will not decline unless the desires and purposes of the business men of the country are defeated by conditions over which they have no control.

The whole world must increase production, earnings and savings in order to replace the dissipation of wealth incident to the war. One alternative is to spend less and to adopt a lower standard of living. The decisive element in the increased cost of living is not the greater price which must be paid for food, clothing, shelter and countless other things, but the higher standard of living which increased wages permit the worker to adopt. Consequently a reduction in wages means the lowering of the standard of living. That is why every well wisher for a better civilization desires the maintenance of the present scale of wages throughout the world, not only in the interest of those who receive such wages, but in the interest of society in general.

WORKING STANDARDS FOR PRESENT WAGE SCALE

It has been possible to pay wages to the rank and file of working men which permit them to enjoy many things not accessible to the worker of the old days, because of the great advance in mechanical inventions and the extension of scientific industrial management. In order further to increase the output per man and to permit the present scale of wages to be maintained, such scientific methods must be further developed along with additional investments in tools and machinery.

Capital must be provided to accomplish these progressive results and, therefore, care should be taken not unduly to curtail profits by taxation or by imposing other burdens which will render it impossible constantly to add to the productive equipment of the country.

In order to set a man at work he must be provided with shop equipment, power and proper housing conditions to permit him to use with greatest effect his physical strength and mental aptitude. The manufacturer must also safeguard the worker as to

health and surround him with those influences which will offer protection against mental and physical fatigue. Highly trained and sympathetic supervision must also be provided that a higher type of man may thereby be developed and his productive efficiency increased.

The eight-hour day has at last been sanctioned by England and by a large section of industrial America. The committee composed of statesmen, economists and manufacturers appointed by Parliament has declared, after a long and practical examination, that, under the auspices of the eight-hour day, a larger production per man for a period of twelve months can be effected. They testify that the aggregate of production will thereby be increased, while conserving the man power of the nation.

It has been ascertained that one hundred million dollars are required annually in England to find work for the natural increase in the population of that country. In this country a very much larger amount will be required for a similar purpose. It is important, therefore, to recognize the need to encourage the investment of capital in productive capacity. Obstructive and vexatious legislation is quite as injurious to labor as it is to capital. Legislation will encourage and not obstruct business if the attitude is affirmative rather than negative.

If capital invested in business cannot earn sufficient to pay reasonable dividends, with something in addition to cover the inevitable hazards of industry, it is obvious that money cannot be found to increase the shop capacity for greater production. Without such recognition to capital, it is a foregone conclusion that higher wages cannot permanently be maintained.

TAXATION AND INDUSTRIAL STABILITY

More than ever is it desirable to encourage, if not to compel by law, the setting aside of reserves to insure the integrity of inventories which are now threatened by fluctuations in prices to a greater extent than at any time within the memory of the present generation; this to warrant confidence in balance sheets for bankers and investors, and to give assurance and courage to industrial managers for the expansion of producing capacity. The profits of an industrial company are represented to a great extent by its inventory, not by cash in the bank. The cash item, as a

rule, represents but a small percentage when compared with the inventory item in the balance sheet. The failure of the bank to repay the cash deposit would prove a minor catastrophe compared to a sudden shrinkage in the value of the inventory, due to a decline in the market prices of the commodities included therein. The absence of a reserve to offset a shrinkage in the inventory values, at a time like this when economists predict and recommend a deflation of prices, constitutes a grave menace to the stability of our industrial situation.

Profits have been swollen by the arbitrary movement of prices upward, but practically all of these profits remaining over and above income and excess profits taxes are represented by inventories made up on the basis of increased commodity prices. It is obvious that the actual realization of such profits is dependent upon the sale of the merchandise at or above the values given in the inventories. Therefore, if, through the decline in prices, the inventory values representing these profits are depreciated, the manufacturer will suffer an unfair and irrevocable loss, inasmuch as he has contributed taxes to the government on the basis of anticipatory or paper profits.

The only protection against the disastrous effect of the deflation in prices lies in the practice of setting up a reserve to cover such a contingency. The present tax law discourages such conservative and necessary procedure. Congress should lend itself to a serious and solemn study of this question. The British Government permits and encourages such practice in the interest of a sound and stable post-war industrial condition. The French Government has not yet collected the excess profits taxes for the years 1916 and 1917 and has announced that such taxes will not become due and payable until after the war, this presumably in the interest of industrial stability. Shall the United States be less conservative and far-sighted in this respect?

The following illustration will enforce the point I am making:

<i>Inventory same tonnage or units</i>		
January 1, 1918	December 31, 1918	Abnormal profit due to price inflation
\$50,000 ²	\$100,000 ¹	\$50,000 ³
at actual cost	actual cost	

The \$50,000 abnormal profit was made in the process of selling at market prices those things which cost 50 per cent less—and as sales were made the stock, or inventory, was kept up to normal as regards units or tonnage, so that at the end of the year the actual cost thereof was \$100,000.¹

This in addition to normal trading profit—The latter profit subject to normal income tax.

The abnormal profit, \$50,000, subject to excess profit tax 80 per cent = \$40,000.⁴ Profit retained \$10,000.⁵

Now, if the deflation process reduces the market price to the level represented by the prices applied to the January 1 inventory²=the actual loss due to this arbitrary fluctuation would be \$50,000.

The arbitrary profit on the way up was \$50,000,³ \$40,000 of which was paid in taxes,⁴ hence the actual loss to the business would be \$50,000 less \$10,000⁵= \$40,000, which sum, in all probability, would represent the increased line of credit extended by the bank, so that the capital of the business would be reduced below the pre-war status even if no profits were withdrawn as dividends or otherwise.

THE REMEDY

Deposit the 80 percent tax⁴ \$40,000, in federal reserve bank, ultimately to be paid the government if the inventory prices do not shrink, and if inventory prices do shrink, the payment to the government would be pro-rated in proportion thereto.

A careful examination of these questions always leads us back to the problem of wages. The prosperity and security of labor is involved to the same extent as capital in the proper adjustment of these vital matters. Inasmuch as the world of business is reconciled to and, in many cases, eager for the maintenance of the existing higher scale of wages, its realization is obviously dependent upon greater production and increased demand. If the economic adjustments can be made to warrant such expansion, the United States will enter upon an era of unprecedented business activity.

The war ridden countries of Europe are eager to purchase vast quantities of our raw materials and manufactured products. It

would seem necessary, therefore, at this juncture, for the United States to finance such purchases either through government loans or by private advances of capital. The government and people of the United States must face this problem with courage and understanding, for unless it is approached in an affirmative and sympathetic manner it will lessen the ability of those countries to pay interest on the loans already made—and necessarily to a large extent in commodities. We must buy if we would sell, and make new loans if we are to realize on those already made. Refusal so to do will menace not only the maintenance of the high scale of wages now current, but may delay for many years the reconstruction of business on a basis which will insure stable and far-reaching prosperity.

We have faith that the correct solution of these problems will be found because the people of the United States have not lowered their ideals, narrowed their vision, nor diminished their courage in this, the hour of victory.

The Civil Service in Post-War Readjustment

By HERBERT E. MORGAN

Of the United States Civil Service Commission

ANY American institution that normally employs in the neighborhood of a half-million workers, or approximately one in two hundred of our entire population, and the personnel of which was expanded to almost a million to meet war demands, must be considered in the general shaking-up and sorting-out process of dismembering the human machinery of war. Such an institution is the civil service of the United States.

There were considerable increases in the civil establishment during the period of war before the participation of the United States. After the American declaration, the great army of workers behind the fighting forces grew by tens of thousands until it numbered almost a million men and women. In the nineteen months of America's participation in the conflict the United States Civil Service Commission gave examinations under the civil-service law and rules to slightly less than a million persons and supplied to the service about 400,000 persons with tested qualifications. The number of civilian employes in the District of Columbia increased from about 35,000 to approximately 95,000. The mechanical forces at navy yards and naval stations increased from less than 21,000 to more than 100,000, and in government ordnance plants from 11,000 to about 40,000. Other branches were greatly augmented. Not only was it necessary to provide qualified men and women in numbers sufficient to meet the unprecedented calls for extra workers, but the places of thousands of men who shifted from the civil to the military service had to be filled as well.

With the war practically ended there is a partial reversal of processes. Two matters which now have the attention of the government are the replacement in either government or private employ of civilian workers who are dismissed because of necessary reductions, and the reinstatement in the civil service of men who left that branch of the government to meet the Hun on the field of battle.

At the time this is being written some reductions in the personnel of the civil service have already been made. The heavy reductions are yet to come, but they will extend over a period of many months. Not all of the "war workers" will be dismissed, however. While it stands to reason that the government cannot employ indefinitely the maximum war force, it is equally certain that never again can its normal business be conducted with the pre-war equipment. A return to the conditions that existed two years ago is utterly impossible. There are indications that a still more extensive naval construction program will be authorized; the regular army will be a larger institution than before the war, at least for some time to come, and a considerable part of the military establishment possibly will be needed to assist in policing Central Europe, in enforcing peace terms, and in the rehabilitation of devastated portions of Belgium and France; increased government ownership, or at least control of public utilities is also among the possibilities; the huge national debt necessitates the collection of additional revenue from many and varied sources; the war may leave us with a merchant marine worthy of the name, something that a thirty years' fight for subsidy failed to accomplish; our foreign trade will be increased; industries must absorb the greater part of the millions of men who made up our fighting forces; soldiers and sailors who, as a result of wounds received in the conflict, are incapable of returning to their former occupations, must be reëducated so as to fit them again to be wage-earners; the government has gone into new lines of work, such as insurance for soldiers and sailors. Each of these things will make work for the civil establishment. In the aggregate they will keep thousands of employes busy.

As soon as the armistice was signed it became evident that, unless prompt measures were adopted to prevent it, the wasteful operation of dismissed employes leaving on trains that passed others bringing in new appointees would develop; for, while reductions in some parts of the service could be regarded as a corollary of the cessation of hostilities, it was certain that some offices, such as the Bureau of War Risk Insurance, the Bureau of Internal Revenue, and the Office of the Adjutant-General of the Army, would be confronted by after-war tasks too heavy for the forces already employed. The obvious thing to do to forestall

such an anomalous situation was to make an arrangement whereby employes dismissed from offices in which they were not needed could be used in offices in which they were needed. Existing law did not permit the transfer of employes from one department to another if they had served less than three years; and in order to meet the situation the President issued, on November 29, 1918, on the recommendation of the Civil Service Commission, an Executive order which provides that the names of persons in the competitive classified service with unrestricted status who were appointed prior to the date of the order, who have served less than three years, who are separated from the service because of reduction of force, and who are recommended for further employment by the government because of demonstrated efficiency in the offices from which they are separated, will, upon request, be entered by the Civil Service Commission upon appropriate eligible registers for reappointment, eligibility thereon to continue for one year from the date of separation.

Reemployment registers established under the terms of the Executive order have been in a constant state of exhaustion, the eligibles having been certified and appointed as soon as they were available. There has been a net reduction in the personnel of some thousands since the signing of the armistice. In practically all cases, excepting employes of ordnance plants of the army, those who have left the government service and returned to their homes have done so because they did not wish to remain. Large numbers of persons entered the civil service during the period of war for patriotic reasons and at some personal sacrifice, and many of these have felt that they were justified in returning to their homes and again taking up their normal duties.

It is expected that, when the reductions in the civil service become heavier, there will be a surplus of eligibles on the reemployment registers. With a feeling that discharged war workers should have the assistance of the government in obtaining employment, as well as with consideration for the larger economic aspects involved, the Civil Service Commission is in communication with the Department of Labor with a view to making arrangements in advance for the replacement in private employ of surplus eligibles on reemployment registers when such surplus shall exist. Also, the commission recommended to the chairmen of the Senate

and House committees on the census that provision be made in legislation authorizing the fourteenth decennial census that eligibles on reemployment registers established under the Executive order of November 29, 1918, shall be used, so far as is practicable, for filling positions in connection with the census. The census bill, which has been reported from conference, contains such a provision.

Anticipating the time when men who left the classified civil service to enter the war would be mustered out, and, therefore, seeking employment, the Civil Service Commission recommended to the President that provision be made for the reinstatement in the civil service of such men. Accordingly, the President issued, on July 18, 1918, the following Executive order:

A person leaving the classified civil service to engage in the military or naval service of the government during the present war with Germany and who has been honorably discharged may be reinstated in the civil service at any time within five years after his discharge, provided that at the time of reinstatement he has the required fitness to perform the duties of the position to which reinstatement is sought.

Under the reinstatement rule which applies to persons other than those who come within the terms of the Executive order quoted, a person who separates from the classified civil service without delinquency or misconduct may be reinstated *in the department from which he separated* upon the request of such department made within one year of the date of separation. Under the terms of the Executive order applying to soldiers and sailors in the present war, a person who comes within the terms of the order may be reinstated *anywhere in the classified service* within five years after his honorable discharge from the military or naval service, provided that at the time of reinstatement he is fitted for the work to be performed.

The civil-service law and rules do not give to the Civil Service Commission any power of appointment or removal; that power is left where it was prior to such law, namely, in the President and the heads of the departments. Therefore, the commission is not authorized to oust present incumbents of civil positions to make room for discharged soldiers and sailors who are eligible for reinstatement; the most that the commission can do is to bring their desire for reemployment in the government service to the atten-

tion of appointing officers—that is, heads of departments and independent offices. The action taken by the commission with this end in view is shown in the minutes of its proceedings for January 9, 1919, as follows:

2. REINSTATEMENTS UNDER EXECUTIVE ORDER OF JULY 18, 1918, OF MEN WHO ENTERED THE MILITARY OR NAVAL SERVICE.

The following outline of action to be followed with reference to reinstatements under the Executive order of July 18, 1918, is approved. The order provides for reinstatement in the civil service at any time within five years after discharge from the military or naval service.

Public announcement will be made that men who are eligible for reinstatement under the Executive order of July 18, 1918, may apply direct to the office or establishment from which they entered the military or naval service if they desire reinstatement there, or to the proper district secretary if they desire employment in some branch of the field service, or direct to the commission if they desire reinstatement to positions filled from the commission's registers at Washington.

General authority will be given to boards at various government establishments, such as navy yards, arsenals, engineer districts, etc., to reinstate men who meet the requirements in positions for which the boards maintain registers. District secretaries will maintain lists of persons eligible for reinstatement who desire reinstatement in positions for which the district secretary maintains an eligible register, and the commission will likewise maintain lists for positions filled from the commission's registers. The attention of appointing officers will be called to these lists of persons eligible for reinstatement.

In determining qualifications, the physical condition shown upon a man's discharge from the military or naval service will be accepted, unless there is reason to doubt that his present condition is the same as when discharged, when further physical examination may be required.

Where physical condition is such as seems to render the man ineligible for reinstatement, the case, with the man's previous record, will be reported through the commission to the vocational board with a view to the applicant's possible rehabilitation.

It has not been the practice of the Civil Service Commission to maintain lists of persons eligible for reinstatement under the usual reinstatement rule. Persons eligible for reinstatement under the rule and who desire it are required to make application for reinstatement to the office from which they separated, and upon the request of such office the commission issues a certificate authorizing the reinstatement, if it is permissible under the rules. It will be noted, however, that in the case of discharged soldiers and sailors who are eligible for reinstatement under the Executive order of July 18, 1918, the commission plans to go further and will

do everything within its authority to assist them to find new positions in the civil service.

The preference in *original* appointment to civil positions which the present law allows to discharged soldiers and sailors is specified in section 1754 of the Revised Statutes, which provides that persons honorably discharged from the military or naval service *by reason of disability resulting from wounds or sickness incurred in the line of duty* shall be preferred for appointments to the civil offices, provided they are found to possess the business capacity necessary for the proper discharge of the duties of such offices. A person who has been allowed preference under the statute has the following advantages: (a) He is released from all age limitations; (b) he has to attain an average percentage of only 65 to be eligible, while for all others the average percentage required is 70; (c) having attained an average percentage of 65, his name is placed on the register above, and is certified before, those of persons who have not been allowed preference; and (d) he is released from the law and rules relating to the apportionment of appointments. (Under the law, positions in the government offices at Washington, D. C., are apportioned among the several states and territories on the basis of population, as nearly as the conditions of a good administration will warrant. Positions outside of Washington are not so apportioned.)

Persons entitled to preference under the statute are not released from any requirement as to physical condition, or from any other requirement of the examination for which application is made, except those specifically set forth in the preceding paragraph. The civil-service regulations as now framed, specifying certain physical defects which will debar from all examinations and other physical defects which will debar from certain examinations, are based upon the requirements of the service as established by the several departmental chiefs.

Legislative provisions are now under consideration by Congress with a view to determining what preference, including release from physical requirements, may be allowed to discharged soldiers and sailors. Where the bars applying to the physically disabled are let down in favor of an applicant with military or naval service, it is contemplated, in drafts which are being discussed, that the Civil Service Commission shall confer with the Federal Board for

Vocational Education to determine whether or not the man has reached a state of rehabilitation which will enable him to render effective service.

Not only are men in the military and naval services who are eligible for reinstatement under the Executive order of July 18, 1918, interested in opportunities for employment in the civil service, but large numbers of soldiers and sailors who have never been employed in the civil service and who are soon to be discharged may desire to know what opportunity the civil service offers for employment. With this in view the Civil Service Commission communicated with the Secretary of War and the Secretary of the Navy on December 17, 1918, requesting authority to appoint representatives of the commission at all establishments of the army and the navy in the United States, where service men are or will be assembled in considerable numbers, in order that soldiers and sailors soon to be discharged may readily obtain information concerning opportunities for employment in the civil service. The necessary authority for the appointment of these representatives was issued by the Secretary of the Navy on January 2 and by the Secretary of War on January 4.

At the time this is being written, forty representatives of the Civil Service Commission are in the field visiting the various establishments and making nominations to the commission for the appointment of representatives for the purpose stated. Many have already been appointed and the full organization is rapidly nearing completion. Pending the appointment of the special representatives, the commission brings opportunities for employment in the civil service to the attention of men at the military and naval establishments through permanent local boards of civil-service examiners near such establishments. The commission is entrusting the work of representation at military and naval establishments to welfare workers who are already on the ground. Keen interest in the project is being shown by these welfare workers as well as by the commanding officers and their subordinates and by the men in whose behalf the work is being done.

Besides making it easy for men at military and naval establishments to obtain information concerning present opportunities, the commission is instructing the men through its representatives in the manner of making use of the civil-service organization after

they return to their homes. This organization consists of approximately 3,000 local boards of examiners, made up exclusively of federal employes, in every part of the country, and reporting to district secretaries in twelve civil-service districts, all under the supervision and direction of the commission at Washington.

The local boards of examiners have offices in all cities that have house-to-house delivery of mail, and in some smaller cities that do not have such delivery. All local boards of examiners are supplied currently with announcements of examinations and are fully informed concerning civil-service matters generally. Discharged soldiers and sailors are instructed to keep in touch with local boards of examiners in their respective communities in order that they may be currently advised as to opportunities for employment. Those who live in communities in which the Civil Service Commission is not represented are instructed to communicate directly with the commission at Washington or with the nearest district secretary, whose address is furnished. In a normal year there are from forty to fifty thousand appointments in the federal civil service, embracing every class of occupation from mere unskilled labor to the highest grades of technical, professional and scientific positions.

Discharged soldiers and sailors, as well as all other citizens, are encouraged to make full use of this country-wide organization. It has met the relatively moderate demands of peace and has stood the acid test of war. It saved the government millions of dollars and much precious time in the feverish haste of preparing for war by supplying when needed thousands upon thousands of men and women who had been tested by examination and found qualified to perform work of certain kinds for which they were certified as eligible.

The operation of the civil-service system as a recruiting agency is illustrated by the methods employed to meet the changed conditions brought about by the war. During the war period, for the first time, the War and Navy Departments delegated to the Civil Service Commission authority actually to employ labor in addition to the duty imposed by law of testing applicants and certifying eligibles. The system adopted for the navy-yard service furnishes the best example.

The usual procedure in filling vacancies in the mechanical forces

at navy yards and naval stations is to receive applications at the several yards and stations for the classes of work in which there is likely to be need for additional men. Under this method the applications are received and the ratings made by the local boards of civil service examiners at the yards and stations. These local boards, with reference to the administration of the civil-service law, are under the direct and sole control of the Civil Service Commission at Washington.

When it became certain, on account of the international situation, that a greatly augmented force of civil employes at naval establishments was necessary, it also became evident, owing to industrial conditions prevailing, that the customary means of recruiting the navy-yard service would fail to meet the needs in certain trades, especially those connected with shipbuilding. It was plain that agencies in addition to the local labor boards must be employed, if the tremendously increased volume of naval work was to be kept from lagging.

At once the Civil Service Commission made an arrangement with the Navy Department to instruct the responsible officers at navy yards and naval stations to make daily report to the department by telegraph of their respective urgent needs, that is, the needs which could not be met through local filing of applications. The telegraphic reports from the several sources were collected in the Navy Department and transmitted daily to the Civil Service Commission.

The commission, in turn, each week, or more frequently when necessary, mailed a compilation of these specified needs to each of its 3,000 district and local boards. All of these representatives were instructed to use every proper effort to locate men with the qualifications desired who were willing and able to accept government employment. The district and local boards disseminated the information by sending notices to local newspapers, by enlisting the aid of local trade-unions, by keeping in touch with offices of the United States Employment Service of the Department of Labor, and by directly approaching individuals when there was opportunity for personal interview. Care was exercised to avoid undue interference with employes of private plants. The American Federation of Labor also rendered assistance of the greatest value in this work of recruiting skilled labor. During

the nineteen months of America's participation in the war, as a result of these special efforts, the mechanical forces at navy yards and naval stations were increased by more than 80,000 men.

In all cases of urgent need, when men could be found who were said to possess the desired qualifications and who were in a position to accept government employment, the Civil Service Commission arranged for one of its recruiting agents in the field to call upon each such man, receive his application showing his training and experience, look up his references, and give him a rating on the spot. If he was found eligible, the recruiting agent purchased his railroad ticket and shipped the man immediately to a naval establishment which was in need of his services, the government paying for the expense of transportation if the man was willing to sign a contract to work for six months. When practicable, available men were assembled in groups at convenient places for testing and shipment.

Methods similar to those employed in the case of the navy-yard service, varied to fit the peculiar conditions, were applied to recruiting for other branches and positions.

It is probably not generally understood that in many of the examinations given by the Civil Service Commission, the competitors are not required to assemble in an examination room for a written examination, but are graded upon their training and experience and where necessary, upon their physical condition. These so-called non-assembled examinations are given for two general classes of positions, viz: (1) Mechanical trades and similar positions, and (2) high-grade technical, professional and scientific positions, and administrative positions which cannot adequately be filled by promotion and for which the government requires men or women whose fitness is demonstrated in a record of successful experience. In such examinations competitors are rated upon the sworn statements in their applications and upon corroborative evidence adduced by the commission.

In his annual report issued in December, 1918, the Secretary of the Navy paid the following tribute to the war recruiting efforts of the Civil Service Commission:

Under the law, all navy-yard workmen must be recruited through the civil service, and the department desires to express its gratification and appreciation of the manner in which the Civil Service Commission met the emergency and

by the creation of almost a new organization and the fearless cutting of all needless red tape has done all that was humanly possible to meet the navy's demands in the shortest practical time.

In a statement recently sent out from the naval aircraft factory at Philadelphia, the following appeared:

On October 1, 1917, the first mechanic was hired at the naval aircraft factory the only government-owned industry of its kind in the United States. On November 1, 1918, there were 3,642 men employed in building flying boats for the navy. . . . Civil service rules, at first looked upon as a handicap, had to be dealt with and naval regulations were to be taken into consideration at every step. . . . Testimony of the generally satisfactory caliber of the employees secured under civil service is found in the fact that it was necessary to hire a total of only 6,035 persons to provide for the growth of force and for replacement. In private industry it is often necessary to hire eight to ten persons before a satisfactory employee is secured. Further testimony of the generally satisfactory caliber of the working force recruited under civil service is found in the fact that only 139 persons have been discharged for cause since the start of the factory.

This machinery of the civil service system, smoothed in the running by long use in peace and in war, is ever at the service of those who seek employment. It must be regarded as an important factor in plans of labor readjustment. Notwithstanding the abnormal expansion to meet war needs, and consequent reductions now, vacancies which must be filled are constantly occurring in the vast civilian force. Even at this time examinations of more than one hundred different kinds are open. Specialists are in greatest demand but there is frequent opportunity for the employment of those who have no training in a specialty. The reemployment registers referred to earlier in this article, while they may for a time furnish an excess of eligibles for some positions, cannot be depended upon to meet the full needs of the service at any time.

Reconstruction—A Survey and a Forecast

By A. J. PORTENAR

U. S. Employment Service, Department of Labor

Mr. Portenar has worked at his trade of printing for thirty-seven years; he has carried a union card thirty-two years; he has for four years been in the Employment Service of the State of New York and of the United States. He has met employers as a trade union official and as a public official and has dealt with employes in the same capacities.—THE EDITOR.

THERE is general agreement that there must be a readjustment of the machinery of national industry, but we are not nearly so unanimous as to what is meant by "readjustment." For some, the word "restoration" more accurately expresses what is desired. For others, "demolition and reconstruction from the ground up," would be a summary. Between these extremes, stands a great majority which interprets "readjustment" as "restoration with more or less modification," the degree of modification varying considerably, but the structure of pre-war conditions being in its essentials retained.

The problem is not purely industrial. Adequately presented it would include economic, political and moral phases. But at this moment the emphasis is placed on the mechanisms by which industrial relations may be improved rather than on the fundamental principles on which they rest. When we consider the concrete conditions under which industry will get back to normal peace production, the subject naturally divides itself into two heads: Actions by agreement between employers and organized labor, and actions by employers in non-organized industries.

In the organized industries the struggle will principally concern wage schedules. But there are some industries in which the eight-hour day was unwillingly conceded under the stress of war requirements, and in these industries the length of the workday is likely to be a more bitterly contested question than even wage schedules. And there are other industries which are struggling already for a forty-four hour week.

It has already been made clear that the unions will strenuously resist any reduction in wages. In some instances they are out on

strike now (latter part of January) for increases based on living costs that are still rising. Their claims are that the cost of living is such that any reduction in wages will mean a lowering of the standard of living; that the extremely high prices are largely due to profiteering all along the line, from large producer to small retailer; and that labor was underpaid before the war and entitled to retain its increases even if prices should come down. *Per contra*, employers claim that the high prices are primarily and chiefly due to exorbitant wage demands, and that lower price levels are impossible until wages have been sealed down.

A SURVEY

The course of wage fluctuations usually is that on the upward trend wages lag behind prices; on the downward trend prices lag behind wages. This being so, it follows that rising prices receive their primary impulse from some other cause or causes than advancing wages, although advancing wages may later become a contributing cause to a further rise in prices. Also, by the same reasoning, the removal of the cause or causes which gave the original impulse to rising prices would permit a lowering of prices without wage reductions.

The trend of wage fluctuations in the past four years has been fully in accordance with the rule above stated. The beginning of the war found wages low as compared with then ruling prices, which had for about fifteen years been mounting more steadily and quickly than wages. The demand from Europe sent prices up very rapidly, while wages did not rise as soon, nor as fast nor as far. If we except the metal working trades, in which there was an insatiable demand for skilled mechanics, and in which wages had been for a long time notoriously poor, there was hardly any advance in wages for a considerable period after the commencement of the war in 1914. In fact, during the winter of 1914-1915, there was much unemployment, and to my personal knowledge common laborers in and about New York were working for \$1.75 a day. It was not until the entrance of the United States into the war, when an enormously increased demand was concurrent with the withdrawal of several millions of men from industry, that wages leaped upward, and a more equitable relation was established between the quantity of money in the pay envelope

and what might be bought for that quantity of money. But during that time prices never stopped their upward course, wages being really then a principal factor, but not the only factor in the continuous advance of prices.

In printed sheet and by word of mouth wide advertisement was given to the enormous earnings of individuals. It is not contended that the stories were untrue, but that the inference that everybody was earning the top figures so widely quoted was unfounded. Nor was proper emphasis given to the fact that the big money was largely due to the practice of working days, nights and Sundays. A boy of nineteen was mentioned to me as earning forty dollars a week. Inquiry brought out the fact that he was working thirty-four hours overtime a week. His hourly rate was only forty cents, after he had become a semi-skilled man. Incidentally, the effect on his health was becoming apparent.

As to profiteering, it is not necessary to present argument. An opportunity such as only a convulsion like this war could give was not wasted by those in a position to take advantage of it. Excess profit taxation retrieved for the public use some of the proceeds of the joyous stream of gold, though even with that subtraction there was exceeding fatness. And the little profiteers—certain middlemen and retailers—who got all they could and kept all they got—yes, the war ended too soon for some people.

Among others, one more cause of high prices must be mentioned, and a single illustration will suffice. The *Philadelphia North American* of September 2, 1917, said: "Delaware County is \$25,000,000 richer through four months of war." But further reading developed that it was not the people of Delaware County who had gained that sum. It was the landowners who had been enriched. The same authority added that "Rents have doubled and in many instances gone higher." How many times \$25,000,000 was thus saddled upon the people throughout the country? They made the increased values by their presence and industry; then they were penalized in the form of doubled rents for their homes; and then they paid some more unofficial taxation in the increased prices of commodities for which the doubled rents of factories and stores were the basis. Yet, though it was under their noses, the makers of the excess profits tax failed to see this unearned increment as a source of revenue—a source of revenue so

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large, indeed, that had it been taken in its entirety through land value taxation, it would probably have eliminated the necessity for selling liberty bonds, and might have saved us largely from a public debt of fifteen billions. And that would have had a very beneficial effect on prices.

I have been at some pains to show that prices can be lowered by other means than through wage reductions, and have run counter to high authority in doing so. In a Senate debate on January 21, Senator Harding said: "You can't reduce the present cost of living and keep up the present American wage," and without doubt most people of the kind who "count" will think with him rather than with me.

But I repeat that you can. These terrifying prices must come down, and they will seek the line of least resistance in their downward course. If wage reductions offer the line of least resistance, that will be the channel by which they will get down. But in respect to organized labor, that line may not be the line of least resistance. The unions have received large accessions of membership, and they have partaken to the full in the increased consciousness of their social value which has come to all the people because of their universally acknowledged importance in achieving victory in the war. Maybe they will eventually prove to be capable of less resistance than some of the other lines through which price recessions can be secured, but they will not let anybody act on that assumption without demonstrating it by a fight. The effort will be made and the fight will follow.

Perhaps the fight will not follow if machinery (official or otherwise) is maintained for the settlement of disputes without resort to strike or lockout. But even in that case wages will come down little, if at all. It is just as probable that increases rather than decreases will be the subject matter of arbitrated disputes. And here is the reason: The position of both employers and organized labor has changed toward arbitration in the past twenty years. Then "Nothing to arbitrate" was a common expression of employers, and such an attitude by employers was a standing grievance of the unions. Now employers whose people are organized are usually willing to arbitrate, while an aggressive minority of the union membership has adopted the discarded attitude of the employers toward arbitration. Among the majority in unions are

many members who can be swayed toward any course by stronger personalities, and arbitration decisions which are decidedly unfavorable may be met by repudiation. Certainly they will only postpone an upheaval, and not even that for long. The industrial history of the last ten years has shown that it is becoming an increasingly difficult task for responsible union officials to hold the more turbulent portion of their membership in check, and it will be more difficult in the immediate future than it has ever been heretofore.

What has been said of wage disputes is equally applicable to any other disputes that may arise. Discharges are quite likely to take second place as a cause of friction, and it is one of the probable developments of the near future that a review of alleged unjust discharge by some agreed upon tribunal will become a common feature of collective agreements.

The form of arbitration will also be a matter of much debate, even though the thing itself be mutually desired. Official arbitration has been successful from a labor standpoint during the war period, because the Big Stick was generally used on the employer, and because the leaders of organized labor were willing to "take a chance" with official arbitration for really patriotic reasons. But in normal times organized labor is suspicious of official arbitration which has any real power of interference or enforcement behind it, because that is compulsory arbitration in principle and may easily become compulsory arbitration by formal legislative enactment, and that is one industrial policy to which organized labor is a unit in opposition.

The War Labor Board has in the main made decisions satisfactory to the workmen, and its continuance may for that reason meet with tacit approval by them, at least until its personnel and policy are changed. But that very consideration would operate to make its continuance undesirable to the other side. Complaints from employers that the administration and its various agencies have been unduly favorable to labor have been very frequent. An effort to terminate the existence of the board is therefore a probable move on the part of employers.

There will never be any kind of a court whose decisions will please everybody. Yet if any peace at all is to be maintained, there must be a tribunal of some kind to which disputes and

grievances are referable. As applied to industrial disputes, the best form, in my opinion, is a body in which both sides are equally represented in voting power, regardless of numbers present; whose membership is composed of the biggest men on both sides; and whose decisions when rendered are final. It is a question open to debate whether they shall be empowered to call in an umpire when deadlocked, or whether they shall discuss a question indefinitely until decision is reached. Both methods have advantages and disadvantages so nicely balanced that opinion has not crystallized upon either.

Organized labor will have much to say about matters of public policy, such as health and unemployment insurance, and child labor laws. It will increasingly concern itself with policies that are generally regarded as political rather than industrial, such as public ownership of public utilities, methods of taxation, education, and the powers of the judiciary. In this connection, and largely owing to the formation and development of the British Labor Party, there has recently arisen within the body of trades unionism in this country, a movement to form a labor party which would almost certainly take the British party for its model. This movement is due to the growing perception of the fact that industrial injustice may be created or maintained by political instruments. Hence political action is necessary to change those instruments, be they laws or methods of government, in order to remedy industrial injustice.

Mr. Gompers and the Executive Council of the American Federation of Labor are officially on record in opposition to the formation of such a party, while favoring many actions which will be a part of the program of the party. In all likelihood, the party will be formed in spite of the opposition of official unionism. But because of that opposition it will not attain the size and influence which would be its portion if there was unanimity. And for the same reason it will not be an important factor in the settlement of the reconstruction problems of the immediate future. It will be composed of the more radical groups and individuals in the labor movement. Its growth or even its continued existence will depend upon influences outside of itself. If there is progress steady and fast enough to enable the officials of the American Federation of Labor to justify the position they have taken, the

new movement will languish or merge itself into the Socialist Party; but if reactionary influences are able to prevent or greatly retard the items of the labor party's program, the opposition of conservative leaders like Mr. Gompers will be swept aside.

A CROSS SECTION STUDY OF LABOR CONDITIONS IN ONE SECTION OF NEW YORK CITY

When the problems of reconstruction are viewed in relation to the mass of unorganized workers in this country, who form a large majority of the whole number, the picture is vitally different from that presented when dealing with organized labor. The power of employers to impose their will and the power of employees to resist that imposition are both in inverse proportion to the respective powers in the other case. In every particular, from wages to welfare, immediate results will depend upon the temper and degree of enlightenment of employers.

In the district in which my daily work is done, my contact with the industrial situation is intimate, and it is principally the first-hand observations there made that are the basis of my comments. Otherwise, I have only such sources of information, through conversations and printed reports, as are open to everybody. A word, therefore, as to industrial conditions in the Borough of Queens, City of New York. The industries are extremely varied, ranging from airplanes to woodenware, but while the variety is great, most of the industries are represented by one or a few shops, sometimes small. The dominant industry is metal working and machining in many forms, with automobiles, caskets, chemicals, cards, furniture, food products, glass, lumber, paper goods, paints, shoes, textiles and woodworking more or less prominently represented. There are estimated to be at this time 75,000 persons, of which about one-fourth are women, employed in 1,100 industries. The industries of the district, if the building trades are excepted, are in the main not unionized, although union men are scattered among the employees. Those industries which did not go into war work have been somewhat favorably affected from the employers' standpoint by the signing of the armistice; those which did war work have practically suspended operation. The labor market is heavily in favor of employers so far as *number* of applicants goes, but when *quality* is a factor, demands are still rather difficult to supply. In some skilled lines, supply is as scarce as it has been

any time for two years past. But speaking generally there is a considerable excess of idle men over available jobs. If the picture thus drawn of conditions in this district is in its main features a replica of conditions elsewhere, then my observations may be capable of wide application.

As always, the question of wages is uppermost. It is already evident that the employers can reduce wages, and some of them even thus early have gone very far in their efforts to do so. Unlike the men in the unionized trades, the unorganized workers were willing to acquiesce almost immediately in wage reductions, which in most cases ranged from 12 to 15 per cent. For the present, they reject offers which carry reductions greater than that. But if the pressure of unemployment increases, as it seems almost certain it will, past experience indicates that they will make further concessions. An unusual phenomenon is that unskilled laborers are showing perhaps more independence than the skilled workers.

The unorganized workers are now, as they have always been, wobbly as to the amount they will work for; no matter what figure they have determined on, it is always possible that they will shade it a little, although no doubt there is for each individual an irreducible minimum somewhere. For the non-union workers in an organized trade the scale of the union is indirectly but none the less truly the measure of their compensation.

Yet it must be said that up to the present time (late in January), applicants of all kinds have shown more determination to uphold self-created standards than they did before the war. "I can't live on that" is the statement which usually accompanies refusal. The reductions already made seem to have been anticipated and accepted as a matter of course. It is difficult to forecast the future in this respect. Will they submit as they have always submitted hitherto, or will they reverse industrial precedents and offer unexpected resistance? But one thing seems clear—either submission or resistance will be accompanied by more deep-seated bitterness, and probably by more open expression of that bitterness, than we have ever known before. While they have not the aggressiveness and assurance which come with organization, they too have been touched by those intangible currents with which the industrial atmosphere is charged.

On other matters relating to employment they are not vocal. A nine-hour day will be accepted if an eight-hour day is not available. Even a ten-hour day finds some takers if the Saturday half holiday goes with it. It is not they who are talking of arbitration, or discussing industrial democracy. The pay envelope is the engrossing subject of their thoughts and the contents of the pay envelope will determine their state of mind and attitude in this period of unrest—that is, it will for awhile.

The attitude of employers as to wages varies all the way from a willingness to continue indefinitely at the level reached after the initial reduction already mentioned, down to a determination to restore pre-war wages, with the majority looking toward lower, if not the lowest levels. They express gratification at again seeing lines of applicants at their doors in the mornings, and some have recently restored suspended rules to the effect that applications for employment can be made only at that time. I have heard utterances among them which may be summarized in the words, "Our turn now." However, it is only just to say that the majority talk in a way which evinces a new outlook and a greater willingness to concede the existence of a viewpoint other than their own. I was about to say that they were willing to concede the existence of rights other than their own, but that probably is not true. A more accurate statement is to say that they concede that more consideration should be shown than has been customary by those whose habit it is to regard their business as an autocracy and themselves as its rulers.

Our employers are showing decided interest in methods of maintaining industrial peace and promoting good relations apart from that perennial topic of wages. There has been formed in the district a Personnel Managers' Club, which holds frequent meetings, at which the addresses of prominent speakers are followed by open discussion. The phrase "industrial democracy" is used often without startling anybody, although I am inclined to believe that the implications of that phrase have not been critically analyzed. The causes of and remedies for labor turnover creep into the discussions regularly, even when the announced topic bears a different title. Until now academic discussion has been the only result, but the club is only a few months old. It was formed at a time when the problems created by war condi-

tions confronted employers, and the factors of the equation are considerably altered now. So far as I know, none of the members have made any practical changes in their methods of handling the human element in production, nor (again so far as I know), are they considering any definite innovations.¹ They seem to be standing with reluctant feet at a point of departure from familiar paths, their faces turned in the right direction, but themselves not ready to go confidently forward. Not all of them, however; there is among them a considerable number of hardshell Tories, unconvinced of the necessity for change and unafraid of portended consequences.

A FORECAST

My reading of the signs of the times is that only mildly palliative measures may be expected in the so-called "reconstruction" period now before us, and that even these will meet with considerable opposition. There is no definite program such as is outlined in the Whitley report to the British Parliament, and even the American Federation of Labor has not asked for so much as in that report is officially conceded as a minimum for the attainment of improved industrial relations.

In Great Britain there has already been officially set up machinery designed to give the working people a voice in the making of trade agreements and the adjudication of disputes, in non-union as well as unionized industries. In this country the best we have yet secured was an official request made under the pressure of war conditions, that existing means for negotiation and arbitration be continued, and new means created where none existed. The attempts of the War Labor Board to create such new machinery where none existed (i.e., in non-union industries) were a conspicuous failure.

It is a seriously debatable question how long any amount of amelioration in industrial relations, without structural changes in the social edifice, will suffice to keep the working population in a state of reasonable contentment. It is indisputable that the war has been a ferment of tremendous power, the action of which cannot yet be determined. History has shown that a victorious people is usually a complacent people, but there is much reason

¹ I have just been informed that a Long Island City employer is about to establish a profit-sharing system.

to anticipate that in its consequences this war will furnish a variation from historical precedent. Noble sentiments have been widely disseminated as stimulants to warlike enthusiasm; signs multiply that the people propose to give these glittering generalities concrete applications.

There is a general opinion that well organized and reasonably successful trades unionism is immune to direct actionist virus. From a letter written to me on June 10, 1914, by the late Prof. Robert F. Hoxie, is quoted this extract:

I can hardly agree with you that it is only a few Socialists who stand in opposition to the business unions and the pragmatic business union progress. Aside from well defined groups of predatory unionists, mainly in local bodies, I have become convinced by observation and inquiry, that there are between 500,000 and 800,000 men who can be called revolutionary unionists and I find that *many of the revolutionaries are men of age, experience and substance.* (Italics mine.)

Note that Professor Hoxie expressed this view in reply to my assertion to the contrary. But because of things I have seen and heard, I am now inclined to give much more credence to his opinion.

The civilized world stands in living fear of a thing it calls Bolshevism, yet does not recognize the fact that it was our own civilization that spawned and nourished Bolshevism. The world would stamp it out, or at least set barriers to its spread, so there is talk of destroying it with force. But force will not destroy the thing even though it may suppress it for a time, because in justice backed by force was its father and its mother. It will be useless to set a guard against it at the piers where ships dock, for its seeds are implanted in our own industrial organism. No ring of armed men can stay the diffusion of its subtle poison where injustice makes misery, and misery makes desperation. No ring of armed men is needed where the sunlight of justice acts as a disinfectant.

But what is justice? We must formulate a working hypothesis, for an exact definition is impossible. But that which cannot be defined may be described. The test of justice is its inclusiveness; it must be just to all men. Brain and brawn should each receive the full value of work done. If that were given, every one who works would be sure at least of decent subsistence to which he is entitled by the very fact that he has worked.

Decent subsistence is a scarcely definable phrase, not to be stated in terms of money, yet easily comprehended. It means food, shelter, clothing, recreation and opportunity for education; nothing extravagant, nothing luxurious, nothing lacking.

"Economic justice" and "living wage" are not completely synonymous terms, but, directly or indirectly, every issue that arises between employer and employed has in some aspect a bearing on wages. It is held by some that the solution of the wage question lies in increased production. But this is only a partial truth. There must also be equitable distribution of the fund created by production. It is in distribution that the conflict of interest arises, and it is the belief that the employer benefits disproportionately by increased production which underlies the usual attitude of workmen.

I am not one of those who believe that all work is equal in value, and that all rewards should be equal. The law of supply and demand furnishes the only yardstick for measuring the value of work. I will be told that this yardstick is used now. But it is not so. The working of the law of supply and demand is artificially obstructed in our economic life. Big business can hire big brains to find and apply the methods of obstruction. Bribery, intimidation, misrepresentation (printed and spoken), legalism, forcible repression—all these are used. The toxic results of the obstruction are manifested in what is called the economic problem.

Yet there is no danger of catastrophic destruction and complete rebuilding if progress toward justice is permitted to take its naturally slow course through discussion and agitation, unhindered by the artificial obstructions. These come only when the volcano is capped or the stream dammed until the forces thus repressed burst through the bonds that restrain them. The gods could give the great property interests of the country no more fatal gift than too much success in controlling legislatures and finding complaisant courts.

My conscience knows and my writings attest that I wish to secure social justice by orderly procedure. In July, 1913, the Sagamore Sociological Conference invited me to meet Arturo Giovannitti in debate as a competent representative of the labor movement in opposition to I. W. W. propaganda. Is this a cer-

tificate of character, when I warn the captains of industry (yes, and the little fellows, too) that it is not wise to blink the recognition of facts until they see the spectre of hideous spoliation close upon them? They will concede in vain then what now to their minds is far beyond the limits of concession. Nor am I thinking of sops in the form of trifling increases of wages or the installation of this or that feature of "welfare work."

In my narrow field my ear is close to the ground, and the rumblings are ominous, but not yet menacing. From both demobilized soldiers and civilians, come the mutterings. They are not ripe for Workmen's and Soldiers' Councils, but it is not entirely beyond the bounds of the conceivable that they may become so. Everywhere like causes produce like effects, and the anxiety in European capitals today (late in January) is due to fear of the concededly contagious quality of Bolshevism.

There is an emergency problem before us in the present transition period, and emergency expedients are called for to meet the immediate crisis. But let no man doubt that there will remain a fundamental problem of industrial injustice which will only be solved by clear understanding and broad and far-reaching treatment of the permanent factors of our industrial life.

How American Manufacturers View Employment Relations

By STEPHEN C. MASON

President of the National Association of Manufacturers

IT is unfortunate that in all the discussion emanating from the representatives of organized wage-earners relating to industrial standards after the war, "new rights and advantages" for labor are the principal and practically the only topics upon which stress is laid. Much has been heard about the "better times" alleged to be labor's proper reward by reason of "sacrifices" which it is announced were made by the organized groups during the war.

With no desire to belittle the loyalty of the great mass of the workers of the United States, without reference to organizations, it seems the fact has escaped notice that American labor cannot actually hope either to attain, retain or maintain any existing or future "new rights and advantages," unless such privileges are truly connected with public necessity and welfare and shared in by American employers as well as employes. No benefit or advantage can accrue to the employe that does not come from a healthy, successful and expanding industry.

The overwhelming majority of the manufacturers in this country are firm in their belief that absolutism on the part of the employe is just as bad for the general welfare of the nation as absolutism on the part of the employer. The National Association of Manufacturers is confident that, left to themselves without the irritations, exaggerations and agitations of a comparatively small group of individuals, the workers and employers of the United States would readily find a common and equitable basis on which properly to meet every present and future need.

It is essential, however, in order to provide a more healthful atmosphere in the industrial world, and to ensure the success of the effort to reach and maintain a common ground, that the partners in industry—the wage-earners and wage-payers—be given the benefit of constructive, legitimate and impartial encour-

agement from the government, and a healthy, well-informed public opinion.

Any organization which sets for itself the task, or any part of the task, of creating or sustaining an artificial or abnormal economic condition in American industry is certainly not working for the true and proper interests of its members. It is wasting its time, inviting destruction and running directly counter to public welfare.

In America today we hold the great responsibility of providing example for the rest of the world. Confusions and iniquities which have developed in our American industries during the hustle and bustle of waging war on a modern scale should be and will be eliminated in good time. We must lend our every effort to avoid bitterness, acrimony, calamity, howling or whining. Nothing is to be gained by either side, if there are sides, through cultivation or promotion of misunderstandings. We must be mindful of public tension and public interest in approaching and working out our problems of industrial readjustment.

No manufacturer has or seeks to exercise any rights or privileges which any other American citizen may not have or seek to exercise. In readjusting our industries to a new and proper basis for the work of reconstruction and peace no part of our industrial forces can be asked or expected to give up "advantages" to which it is properly or legitimately entitled. The true measure of so-called industrial advantage, in our opinion, is nothing more or less than a question of public welfare and the national good. No man or group of men has any right to attempt to defend an uneconomic industrial condition when every reason that brought about the abnormal condition has been eliminated.

The National Association of Manufacturers stands firmly for the spirit of patriotic industrial coöperation and good will in the working out of readjustment problems. In time of our national emergency, during the progress of hostilities in France, there was born in our American industrial relations the more general realization that coöperation between employers and employes was a patriotic duty and a privilege, for the nation's safety and prosperity, as well as a good business policy. Distinctly recognizing this important fact, the organized employers of the United States have long since been urging, favoring and pledging that

spirit of common interest in our industrial affairs which the war fostered so greatly among all citizens concerning national duty.

The National Association of Manufacturers, as a body, represents practically every important industry in the United States. Its membership of more than 4,000 is found in every state, and its activities, since its inception at Cincinnati, Ohio, in 1895, have been directly connected with the vital industrial affairs of the nation. Manufacturers within its rank have contributed very largely to the remarkable progress of America, during which the gross value of the industrial output of the entire country, as measured by Census reports, has risen from one billion dollars in 1850 to eleven billions in 1899, twenty-four billions in 1914 (the last normal year) and, considering the very rapid rise in monetary values during the past four years, may be estimated to have doubled the last amount in 1918. Several years ago the annual output of the manufacturing industries of the United States began to exceed in money value the combined annual output of any other two nations of the earth; and the factory production of the members of the National Association of Manufacturers, alone, began to exceed the value of the total annual production of any single foreign nation.

As the president of the Association, therefore, I consider it not only a privilege but a duty to give, as briefly as possible, an accurate account of the nature, scope and purposes of an organization which has grown to be the largest national association in the world whose active membership is wholly made up of manufacturing establishments representing every phase of industry. A clearer understanding and wider appreciation of the spirit of the organization, of the American manufacturer's attitude, and the principles animating the work of the National Association of Manufacturers, may be had by considering and interpreting separately its Declaration of Labor Principles:

(1) Fair dealing is the fundamental and basic principle on which relations between employees and employers should rest.

In this statement we have put tersely our firm belief that fair dealing in industrial relations is not merely incumbent upon those who work for hire but just as much, if not even more, upon

those who, in their capacity as employers, manage and direct industrial enterprises and supervise the collective or individual labors of others. We consider such a policy "good business."

This organization has intensively and unselfishly fostered and promoted in every practical manner the doctrine that every employer should do everything in his power to cultivate and maintain a feeling and condition of human friendliness and brotherhood with his employes. An employer who does not, has poor business vision and is an undesirable citizen. It has always been a puzzle to employers at what stage of the industrial activity they and their employes ceased to be coöperators.

It is a fact that the larger proportion of the most successful employers in this country are men who have seriously undertaken to restore or maintain conditions of friendliness and coöperative good will in their relations towards their employes. Many obstacles to such efforts on the part of employers have been deliberately fostered by influences outside their individual plants, by those who, while harping on the word "exploitation," have themselves actually and most seriously "exploited" the employes.

Fair dealing on the part of employers toward their employes has been demonstrated on more numerous occasions than fair dealing by employes who have blindly followed the orders of certain oldtime masters of the self-profiting art of misleading labor. In this respect much remains to be done in order to clarify the industrial atmosphere and prevent the bickerings, strife and misunderstandings engendered by such labor misleaders and sowers of destructive class hatred and discontent.

Every legitimate and constructive resource at the command of the National Association of Manufacturers has in the past and will continue in the future to be devoted to fair dealings by employers. We feel that, outside of the everyday practical application of the Golden Rule to industrial relations, it is essential that all proper means of education should be fostered and encouraged. This latter need has already been at least partially filled by the nation-wide educational work inaugurated and carried on by the Association since the early part of 1916. In this campaign we made a somewhat successful effort to re-focus the industrial perspective of the American people and give to all classes of

citizens a better understanding of their responsibilities to our industries and of the actual bearing which industrial prosperity has on the public welfare.

Through a carefully selected staff of public speakers, writers, various forms of printed literature, stereopticon slides and moving picture films, we have spread broadcast the constructive gospel of industrial coöperation. The results achieved have been visible already in the recent more general awakening of political leaders, economists, leading employers and bankers, as well as among various craft and trade organizations, to the need for preaching and practising coöperative relations between the employer and the employe.

The work described has been performed by the National Association of Manufacturers because there seemed to be a general public misconception of industrial problems, needs and conditions which had greatly contributed toward industrial inefficiency and the creation of unrest and strife. It has been carried on free of any tinge of prejudice or controversial effort, simply as a constructive educational campaign to make possible the greater realization of that spirit of fair dealing enunciated in the first article of the Association's Declaration of Labor Principles.

(2) The National Association of Manufacturers is not opposed to organizations of labor as such, but it is unalterably opposed to boycotts, blacklists and other illegal acts of interference with the personal liberty of employer or employe.

From its organization this Association has never denied nor condemned the right to existence of labor unions. It has, however, insistently demanded that labor organizations be founded upon an enlightened public consciousness, and their operations based upon legitimate principles, and that they recognize the right of all workers to engage for their services under such lawful conditions as may seem best to them. Such organizations should establish responsibility for their contracts. Power without responsibility always leads to abuse. There can be little room for doubt that the general disuse into which such labor union tactics as boycotts and blacklists have happily fallen in recent years has proved not only their illegal nature (as numerous court decisions proclaim)

but the emphatic disfavor of the general public regarding such practices.

"Cruel," "cowardly," "immoral" and "anti-social," are some of the judicial characterizations of the un-American labor union weapon, the boycott. The pernicious nature of both this practice and that of labor union blacklists is that they are serious invasions of the rights and personal liberties not only of the employer and employe, parties to a dispute, but inflict injury on third persons who are not interested parties in the controversy. We equally condemn any such practices on the part of employers. Against such oppressive illegal acts the Association has stood and always will stand firm.

(3) No person should be refused employment or in any way discriminated against on account of membership or non-membership in any labor organization, and there should be no discriminating against or interference with any employe who is not a member of a labor organization by members of such organizations.

This declaration embraces the fundamental principle that every person who labors must have the freedom to engage for and deliver his or her services without interference; conversely, every employer of labor must have the freedom to hire the class, grade, quantity and quality of labor best suited to his needs. This is the definition of the important industrial principle of the "Open Shop." It is a principle that should neither be denied nor compromised in the interest of either employers or employes, and is a sound doctrine interwoven with certain inherent, individual, human rights. An analysis of this tenet shows it to be neither offensive nor destructive. On the contrary it is a safeguard of a sacred individual human right whether it is industrial in application and exercise, or otherwise. It is a concept upon which our Constitution and political institutions are based.

(4) With due regard to contracts, it is the right of the employe to leave his employment whenever he sees fit, and it is the right of the employer to discharge any employe when he sees fit.

This declaration is based upon the vested individual rights of employe and employer. No one questions the right of any em-

ployee to terminate his employment when he desires to do so, but this does not carry with it the right to conspire with or influence fellow workers to quit simultaneously with him, to the injury or interference with their employer's business, or to undertake to prevent anyone from taking the position he has left.

On the other hand, it must be recognized that the employer has absolute freedom in the selection of employees that he considers will be satisfactory and efficient for the services required with compensation for such service at the prevailing rates of wages, and the right to dispense with such services whenever he desires to do so.

(5) Employers must be free to employ their work people at wages mutually satisfactory, without interference of dictation on the part of individuals or organizations not directly parties to such contracts.

Personal and legally recognized property rights vested in the builders, managers and owners of industrial enterprises, are involved in this article of faith. Old established common law rights of individuals to enter into such proper contracts as may seem best to each party thereto without interference on the part of third or outside persons are simply defended by this principle. It contains the timely sentiment that individual initiative and the institution of private property is something worth making the greatest sacrifices to preserve. No effort is made to infringe upon any vested or recognized rights or privileges of employees in such a doctrine. Indeed, by stoutly asserting the specific rights of employers, as such, an indirect service is done to workers and an acknowledgment made of the fact that our industrial elements have certain clearly defined limitations in their relations with each other. No one is more vitally concerned in the right of individual contract than the worker. This right was denied in old English statutes and common law and the securing and establishment of this right was one of the first steps toward emancipation of the employed.

(6) Employers must be unmolested and unhampered in the management of their business, in determining the amount and quality of their product, and in the use of any methods or systems of pay which are just and equitable.

Herein is enunciated the fundamental condition of the successful conduct of business that the owners and managers of manufacturing establishments must be protected in their right to operate their plants without outside interference, according to the natural and legally defined regulations of commerce. The principle demands free exercise of individual business judgment and initiative, without which there would be little, if any, incentive to engage in business enterprise, and indirectly insists upon a recognition that the principles of management are primarily and distinctively within the province of plant owners and operators, and the intervention of outside, uninformed individuals or organizations is neither desirable nor proper in theory or practice. As the success and expansion of business depends primarily on management, it clearly follows that you cannot hamper management without injuring industry.

(7) In the interest of employes and employers of the country no limitation should be placed upon the opportunities of any person to learn any trade to which he or she may be adapted.

Unrestricted opportunity for industrial education of the youth of the land so that there may be produced efficient industrial workers, is the underlying thought involved in this statement. It implies a complete rejection of the erroneous and harmful principle of trade unions by which limitations are placed upon the number of apprentices permitted to be employed in the skilled trades. In recent years there has been a widespread awakening of public interest in the subject of vocational training. Municipal, state and even the federal government, realizing the dire necessity for the more general systematic industrial training of our youth, have undertaken extensive plans in this direction. For more than twenty years the employers of the country embraced in the ranks of the association have not only recognized the urgency of this problem, but have consistently made every possible effort to increase the opportunities of any person to learn any trade to which he or she may be adapted. The widespread recognition of this question during recent years is an indication of the soundness of the position taken by the Association upon this question.

(8) The National Association of Manufacturers disapproves absolutely of strikes and lockouts and favors equitable adjustment of all conditions between employers and employes by any amicable method that will preserve the rights of both parties.

This portion of our principles we honestly regard as a long standing monument to the American employer's recognition of the need and value of the maintenance of industrial peace. It will be noted that no specific recommendation as to a means to this end is contained in the principle. This in itself is an absolute refutation of the charge that employers have generally favored any iron-clad form of industrial armistice. Furthermore, no reference is here made to any special views which the employer may entertain as to various forms of industrial arbitration and conciliation which have been tried and in many instances found wanting.

The attitude of the organized employers of the nation in disapproving emphatically of the strike, which is commonly regarded as labor's chief weapon of offense as well as defense, has been no less emphatic with respect to disapproval of the lockout which has been regarded an offensive and defensive weapon of employers. Concretely put, it is the feeling of the members of the Association that the complicated question of wages and related industrial problems, in the interest of industrial development, must be met with the utmost fairness of which human intelligence is capable. The belief is now more general than ever among the employers of America that the old-time selfishness of both the employer and the employe must absolutely be put aside and each be content, the worker to engage for his labor at a reasonably proper wage and the employer to hire labor on the same equitable basis. Going a step further, it is our firm belief that a more common recognition of the actual partnership relation and joint responsibility which exists between the man who pays a wage and the man who receives a wage, would be the greatest single contribution to the cause of industrial peace and prosperity that is capable of achievement.

(9) Employes have the right to contract for their services in a collective capacity, but any contract that contains a stipulation that employment should be denied to men not

parties to the contract, is "an invasion of the constitutional rights of the American workman, and is against public policy and in violation of the conspiracy law. This Association declares its unalterable antagonism to the closed shop, and insists that the doors of no industry be closed against American workmen because of their membership or non-membership in any labor organization.

The evident purpose of such a declaration as this is the affirmation of the sacred and unassailable constitutional right of every worker and of every person to engage for his labor in a free and unrestricted market. Despite the efforts of many to garble and destroy this vital industrial truth, it is unquestionable that the prosperity of this country depends upon strict adherence to this fundamental rule of liberty and justice. The employers of America regard this principle as something that cannot, in the interests of free institutions, be abridged by legislation. In other words, we insist that no man or group of men whether employers or employes, has any right to place a brand upon any human being and say that those so branded, regardless of merit, are entitled to special privileges, and in the same breath to say that those who are not so branded and not willing to be so branded must be limited in or prevented from the full exercise of their constitutional rights.

It may be timely to record the fact that the question of collective, shop bargaining, or coöperative representation already has had earnest consideration by a large number of manufacturers throughout the country, and practical and successful plans embodying such purposes are already in operation in many important establishments. In the adoption of these industrial representation plans no question is raised regarding the membership of workers in outside organizations.

These plans present a method by which employes can deal collectively, through representatives selected or elected by them, with their employers in relation to all questions and conditions of employment. They will furnish a new channel of communication between wage-earners and wage-payers whereby they may better be able to avoid misunderstandings and mutually agree upon satisfactory adjustments of wages, working conditions, etc., and promote and establish such friendly relationships and coöperative spirit as will be beneficial and to the best interests of both. Such

activities are clearly within the scope of this principle of our organization.

(10) The National Association of Manufacturers pledges itself to oppose any and all legislation not in accord with the foregoing declaration.

This principle, the last of the ten embodied in the Association's declarations, is nothing more than a pledge that we will use all proper and legitimate effort to prevent the passage of laws designed by self-seeking interests, to contravene, infringe upon, or take away from the human elements engaged in our manufacturing industries the sacred and inherent rights and privileges involved in any and all of the nine preceding declarations of principles. A careful analysis of the position enunciated in these principles we believe will convince any unprejudiced mind that they are unassailable and might well be adopted throughout the United States, as a sound basis for the conduct and guidance of American industrial relations, in meeting and solving the many existing problems of readjustment.

The spirit of the chartered purpose of the Association is best interpreted in the one word "service"; service first to our country, second, service to our fellow men, both the toilers in the humblest trades and men of genius charged with vast industrial responsibilities; lastly, service to the perpetuation of America's magnificent manufacturing structure.

International Business Coöperation

BY EDWARD A. FILENE,

Boston, Mass.

THE question today is not: Shall we have a League of Nations?

A league is in process of formation even as we discuss it. The point of concern has shifted. The most important single question before the world today is this: *What kind of a League are we going to get?* Questions of reconstruction and readjustment, questions of permanent prosperity for business, questions of democratic progress, questions of social advance are at this moment all secondary to that question. Unless we get the right kind of league, the outlook for sane readjustment, the outlook for business prosperity, the outlook for a finer development of democracy, and the outlook for solid social advance are sorry outlooks indeed.

I want to make two observations upon the question as to the kind of league we want and discuss them briefly in turn. These observations are as follows:

(1) The right kind of league must rest upon a constructive peace based upon justice and sound principles of organization.

(2) The right kind of league must take into account the fact that the lasting peace of the world must be based upon effective and harmonious working out of the problem of business relations between nations; and the fact that there are several pressing problems of business and economics that must be met by international coöperative action if the peace of the world is to be kept during the next few years, not to mention lasting peace.

A CONSTRUCTIVE PEACE

In the first place we must have a constructive, not a patched-up peace. A patched-up peace might for a time satisfy the individual wishes of individual nations, but it would contain the germs of another war. It is not make-shifts and temporizings that we want—we must provide for a lasting peace. At the beginning of the war surgeons attempted to deal with leg wounds by removing just the infected parts, but they soon found the mortality rate following that method was extremely high; then they adopted

the more heroic method of amputation when the case looked doubtful—the mortality rate immediately dropped. The statesman's problem is today a good parallel to the surgeon's problem. The time demands heroic treatment. A constructive peace is one that provides for a lasting peace by a straight-forward dealing with those forces and factors the bad or inadequate administration of which will produce friction that will lead to another war.

Some of these specific things I will discuss in a moment; but this much should be said at this point; we must have enough international organization—courts, councils of conciliation, commissions of adjustment and administration for certain matters, provision for common action to defend the common peace of the world—enough international organization to introduce and keep order and stability in the international situation or business will not have either the chance or freedom to develop along normal and healthy lines. The old condition of insecurity, not to use the stronger term anarchy, in the international situation is a standing bid to reckless, destructive, and ill-considered radicalism. Some business men are likely to shy at the suggestion of any increase in control; they are likely to say that business does not want to add international control to national control of which they already have quite enough.

But it must be remembered, and far-sighted business men are saying, that business cannot succeed permanently save in an orderly and stabilized world. The disorganization of Russia and Germany is not exactly the sort of situation in which business can prosper. So American business men, purely on a basis of self-interest as well as high purpose, have a very deep interest in seeing prevail such measures as will stabilize conditions in Europe. As business men, it is our duty to our interests no less than to our ideals to give profound and sustained attention and consideration to the problem of bringing every possible pressure upon the men who are writing the treaty at Versailles and the men who will be called upon to ratify the treaty at Washington to see to it that the treaty provides for the kind of league that will deal in man-fashion with the elementary problem of keeping order in the world, that is, a league that will really set up those organs of law and order which have proved effective in keeping order between individuals, and a league also that will boldly face

the problem of treating internationally those specific problems of food, raw materials, shipping, business opportunity, and the like which if rightly administered are going to mean bonds of common interest and understanding between the nations and greater freedom for the healthy development of business the world over, but which if wrongly or weakly administered will mean simply the setting of the stage for another war. And that brings me to the second observation I want to make.

Now there are certain things like food, shipping, and tariffs, which if left for each nation to administer solely upon the basis of immediate selfish interest will make for friction and discontent and drive the same masses into the camp of reckless radicalism. Therefore business men are interested in getting a league that will insure a treatment of these things that will prevent this. Let me discuss these specific matters in turn briefly:

A POSSIBLE SHORTAGE OF SUPPLIES

Food Stuff. On every hand we find serious students of the situation predicting a world shortage of supplies after the war. The more farsighted students contend that if the world faces famine after the war it will be due not primarily to inadequate resources but to the inadequate administration of the world's resources. We find, for instance, the memorandum of Inter-Allied Labor War Aims declaring that some systematic arrangement on an international basis, of the distribution of the world's foodstuffs, is imperative in order to prevent the most serious hardship and even possible famine in one country after another. But whatever the cause,—famine, the threat of famine, or even the fear of famine,—it involves certain serious and far-reaching international effects. (I use the word famine in a relative sense to indicate a really serious shortage of supplies.)

A real shortage of necessities in *any* country will concern *every* country because it will tend to breed revolutionary discontent or may even prompt to foreign war the nation that is pinched. The real maintenance of lasting peace is finally more dependent upon its being seen to that there is such an equitable distribution of the supplies of the world among all nations as will meet their imperative needs, than upon any purely political or diplomatic arrangements we may effect.

The outlook is that there is but one thing that will effectively forestall the threat and consequences of a world shortage of supplies, and that is something approaching a coöperative international administration of the world's necessary supplies. I am not thinking of any hard and fast international economic government. I am not thinking of the appointment of an economic generalissimo. We are not liable to turn the business of the world over to a Foch of commerce. I am thinking, however, of a certain international arrangement, which the United States is in a peculiar position to initiate, under which the total resources of the world might be administered in a manner that would best speed up the processes of reconstruction, remove the fear of famine from the world, allay some of the more patent economic causes of revolutionary discontent, and help maintain the peace of the world.

We faced the threat of a shortage of supplies during the war but we met it by the common sense action of coöperative international administration. A food shortage threatened the Allied nations, but each nation appointed its Hoover; they got together; result—there was enough food to go around. This principle was increasingly applied to the whole range of the economic needs of the nations at war with the Central Powers, until finally we achieved a unity of economic administration almost equalling the unity of our military administration. This unity of economic administration for war time was coördinated with finance through the Inter-Allied Finance Commission; with shipping through the Inter-Allied Shipping Council; with export and import relations through an Inter-Allied Board, made up of representatives of our War Trade Board and corresponding bodies in the Allied governments.

In the same way munitions, food, fuel, and other supplies for the prosecution of the war were handled by coöperative action. We saw admirable results from the international pooling agreements regarding nitrates, tungsten, tin, and other such commodities. Subordinate to the Inter-Allied Councils, commodity committees were organized. Now the result of all this economic coördination was that we assured an adequate supply of the materials necessary for the war, and succeeded in organizing the distribution and transportation of these supplies so that the needed

materials were in the right place at the right time and in the right quantities.

Raw Materials. In the matter of raw materials it is even more apparent that it will not do to leave the placement of raw materials to the give and take of bargaining as in the past, with some nations at a decided disadvantage. The getting of raw materials is so tied up with internal content and discontent in every nation and thereby with the maintenance of lasting peace, that the best interests of the whole world demand the existence of some international body that shall study the question of raw materials in the light of its international implications and see to it that the raw materials of the world are distributed in the manner that will best promote the healthy progress and best preserve the peace of the world. Lasting peace will be a foolish dream unless every free and law-abiding nation can get the raw materials needed for subsistence. We may well shudder at the possibilities of international friction leading to war latent in an unregulated scramble for raw materials in which the rule prevailed of let him get who can and let him keep who has.

THE CONTROL OF SHIPPING

Every big sea nation must have its ships, for ships mean not only transportation, but they mean that the nation that controls sea-transportation will have a very great power to control prices at least on raw materials and foodstuffs and eventually if that control is not disturbed might control the finances of the world. It seems therefore clear that ocean transportation after the war will exert marked influence on prices and is therefore basic in any consideration of domestic or world trade. Goods made and sold in this country contain in their market prices the costs of transportation and generally speaking the market price rises and falls in a manner to absorb this cost of transportation while necessarily diminishing the profit of either the producer or middle man.

On goods we export, however, the market price is bound to accord—if we really succeed in world trade—with the world's market price, and any excess in the cost of ocean carriage must, as a general rule, be deducted from the price the producer is able to get. Such deduction under ordinary circumstances affects not

only what he exports but also what he sells at home. This means that if in peace time the price of wheat at Liverpool is, say, \$2 a bushel and the cost of transportation to Liverpool is 10 cents a bushel, the seller in this country will get about \$1.90 per bushel for his wheat. If the cost of transportation, however, to Liverpool is 50 cents, the seller in this country will get about \$1.50 per bushel for his wheat.

Evils similar to these formerly complained of in railroad rates may occur in ocean carriage. There may, in the absence of adequate regulation, occur understanding and combinations leading to great shipping trusts which may exert monopoly power. Under such conditions rates may tend to create other monopolies of buying and selling. Ports may, under such circumstances, be unjustly discriminated against and extraordinary speculation in prices and commodities may be possible.

The same reasons, therefore, that hold good for the regulation of railroads by an interstate commerce commission may likewise hold good for the regulation and control of ocean carriage through some international arrangement, say an international commerce commission. Such a commission is to be welcomed, not feared, by our business men, including our ship owners.

Fixed rates that are reasonably profitable for ocean carriage will give us what we need most—a dependable basis of calculation on which to make offers to buyers in foreign countries and a more dependable and consistently profitable business for owners.

Merchant ships are a part of a nation's defensive power. Until the league of nations which we must have has proved its efficiency, and until nations are ready to disarm, they will not be ready, if they can prevent it, recklessly to turn over their sea transportation to another nation. This lesson has been strongly impressed on all nations by the war. As a result every nation with sea interests will strive for a merchant marine of the biggest size. It is inevitable that there will be an over-production of ships—that is, the nations will duplicate in shipbuilding and in a few years there will be more ships than are actually needed for the carrying work of the world. Ships will then become a less desirable and less profitable investment, and in an effort to adjust matters old and bad forms of control and combination may occur. In any event under such conditions transportation rates will be

extremely low at one time and extremely high at other times according as the temporary necessity for ship transportation is pressing or otherwise. So here again the business-like thing to do is to try to foresee what is likely to happen and to work out some form of international coöperation that will avoid these dangers.

Under the conditions the world is facing, if we use our ship power regardless of the needs of the other nations, that is, without a business-like generous international agreement, we shall not only fail to reap the expected advantages from it but we shall endanger the peace of the world. More than that, we have won our shipping superiority largely while other nations were fighting our war, and if we use it without regard to the pressing needs of those who fought our war then we shall be in great danger of making the world believe that we were insincere in our statement of our war aims—aims for which we were willing to sacrifice the lives of our soldiers and for which we should not now hesitate to use generously our economic advantages.

NECESSITY FOR INTERNATIONAL COÖPERATION

It is unnecessary to do more than mention in passing the friction that is latent in the tariff question unless we bring the federated and coöperative thought and action of all nations to its solution. Now the friction and misunderstanding that will inevitably grow out of these questions I have mentioned *must*, if business is to go on profitably in any country, reach a basis of conciliation and agreement. Two methods lie open for reaching such agreements—either the forced bargaining between individual nations or the treatment of them in an international clearing house for discussion and adjustment such as a finely conceived league of nations can afford. The first is the bungling, slow, costly, and finally the disastrous policy. The latter is the method that sound business judgment will dictate. This set of considerations alone makes a league of nations a matter of business necessity.

Now the point with which I want to close this discussion is this: The emergency demands of the trying years just ahead of us will clearly demand such coöperative international action as will help maintain the internal content of all nations by assuring all nations justice and equality of opportunity for economic development—and just such coöperative international action in mat-

ters of common economic interest among nations is one of the essential features of any league of nations that is to succeed in maintaining lasting peace. So if the business men of America, with their accustomed breadth of vision and sincere devotion to the common welfare of the world, rise to this greatest opportunity of their lives and dedicate the business strength of the United States to leadership in an international partnership for administering the economic necessities and opportunities of the world in such a way as to meet the emergency demands of the next few years, they will thereby be laying the foundations for what will perhaps prove the most important part of the league of nations and will make the major contribution to the maintenance of the future peace of the world.

The moral recoil of the world from the horrors of this war, joined to the constructive statesmanship of the world, will doubtless bring about some kind of a league of nations to restrain a law-breaking and aggressive nation in the future. Shall not American business do its part in completing the structure and broadening the function of such a league so that it may remove the causes of, as well as deal with the occasions for war?

The World-Wide Trend Toward Coöperation

By FRANCIS H. SISSON

Vice-President of the Guaranty Trust Company of New York

WE alone of all the great nations have escaped the blighting effects of the world war; we alone have emerged from the struggle stronger than ever industrially, financially and economically. All mankind needs our help—not our charity, but our coöperation.

We cannot render the service demanded of us, however, if we fail to recognize the fact that while it is necessary for the sake of national prosperity to remove the coercive restrictions of government control as rapidly as practicable it is equally imperative to retain government coöperation with industry, and to preserve many elements in the coördination of our varied business interests effected by the exigencies of the great crisis through which we have just passed.

The spirit of combination, in fact, is manifest throughout the universe. It is exemplified in its larger economic and political aspects in the movement now under way at the peace conference to establish a league of nations.

SIGNIFICANT SIGNS ABROAD

This world-wide tendency is nowhere more pronounced than in England, France, Belgium and Italy, who bore the brunt of the battle for world democracy.

The British Government is striving by various means to foster joint action and coöperation among its industrial elements, as a vital reconstruction measure. For instance, the committee appointed by the government to investigate the iron and steel trades reported that "we are persuaded that only solidarity of action will enable the iron and steel industries of the United Kingdom to maintain and improve their position in the markets of the world. The Committee recommends also that coöperative effort, backed where it is found necessary by government support, should endeavor to deal with the question of ore supplies." Combinations are suggested for the purpose of standardizing production

and reducing costs. The Committee of Engineering Trades proposes that English manufacturers work in large units, formed either by amalgamations or by joint operations, for the pooling of resources and the specializing of production, as well as for the purchasing of raw materials. The Textile Trades Committee recommends that, in view of the modern tendency toward larger units of production and the elimination of economic waste and inefficiency, there should be combinations or working agreements which would avoid duplication of effort and materially decrease buying, producing and selling expenses. The English Shipping and Shipbuilding Committee has directed attention to the need for effective coöperation and coördination among shipbuilders and marine engineers.

To meet the new conditions presented in world trade, the desirability of concentrating banking credit has long been obvious to the bankers of England and, as a result of amalgamations, the leading English banks recently showed these huge deposits:

London City and Midland.....	\$1,570,000,000
Lloyds.....	1,500,000,000
London County, Westminster & Parr's.....	1,250,000,000
Barclay's.....	1,100,000,000
Union of England and Smith's.....	900,000,000

English bankers and business men believe that, in order for them to compete effectively for the world's trade with other countries, this concentration of credit and the extension of branch-banking are necessary steps. Without banking leadership foreign trade cannot be commanded. The effective use of such powers by Germany has taught this lesson. The German banks trading abroad not only were useful financial institutions, but acted as information bureaus for their countries, and their work in this field was largely responsible for the remarkable development of German overseas' trade. German banks not only established subsidiary banks, but in many instances obtained controlling interests in native institutions, giving them a large measure of command of foreign banking transactions.

Even while fighting with "her back against the wall," in the dark days of the war when Germany was hurling its hordes against the Channel ports, England was forming amalgamations for peace business, not only in banking but also in various trades

and manufactures. And England is moving toward larger industrial, commercial and financial units because she is impelled to do so by the sheer force of circumstances, and has had foresight enough to see that only through such means can economies be effected which will prove important factors in foreign trade expansion, as well as in successfully meeting foreign competition in the home markets.

The French Government has created a central purchasing and distributing organization to facilitate the reconstruction of devastated provinces. It is known as the Central Association for the Restoration of Industrial Activities in the Invaded Regions. This association has formed a central buying agency bearing the title of Central Bureau for Industrial Purchases for the Invaded Regions, and the French Chamber of Deputies has voted the association a fund of \$50,000,000.

French steel men believe that one of the best ways for America to help them is by placing at their disposal, as soon as practicable, some tried forms of coöperative selling. The French steel makers do not wish to be obliged to obtain prices from several hundred American firms, but prefer to obtain them from the representatives of groups of manufacturers of steel equipment. These representatives should be in a position to take the blue prints and specifications prepared by the central purchasing office of the French steel industry and name prices and dates of delivery on every piece of machinery and every pound of material needed to enable the French makers to resume the manufacture of steel on the sites of their old plants.

The Société Mineraux et Metaux has sent agents to this country to inquire into all phases of the mining and metallurgical industries and to gather data on them, for the purpose of assuming a leading rôle in the buying here of lead, copper and zinc for use in France. This society has a capital of 10,000,000 francs, and represents a coöperative organization of metal interests for the purpose of keeping them in contact with the producers of the world and fully informed as to statistical data of the mining and metallurgical industries. Among its shareholders are twenty-six mining or metallurgical companies, representing interests in France, Spain, Mexico, Algeria, Tunis, Siberia, Chile, Bolivia, Italy and Russia.

A central reconstruction purchasing committee, similar to that formed in France, has been organized in Belgium. And recently there was constituted at Milan among the most important firms in Italy carrying on an import trade in industrial machinery and machine tools from the Allied countries, the Italian Association of Importers and Merchants. The purpose of this organization, as outlined in the statute authorizing it, is the study, protection and promotion of all those interests appertaining to the importation of the articles mentioned.

AMERICA'S NEED FOR COOPERATION

With preparations such as I have briefly indicated under way in the leading European countries, which are planning to reduce their enormous indebtedness by increased exports and decreased imports, the American manufacturer and exporter can readily appreciate the fact that they will face the keenest competition they have ever experienced, particularly in those markets which the war has opened to us. And it should be remembered that the productive capacity of the United States has been greatly expanded by the necessities of war. One authority has estimated that the income of the people of the United States for 1918 totaled \$73,400,000,000, as compared with \$68,800,000,000 for 1917, and \$34,800,000,000 for 1913. Unless we are able to maintain the trade advantages gained abroad during the last four years, it is obvious that we will be confronted with the serious necessity of adjusting our productive capacity to a shrinking market. And we cannot hope effectively to meet foreign competition unless we coöperate as our foreign competitors are doing.

But we cannot adequately coöperate outside of the United States if we are compelled to indulge in costly and wasteful competition within our own borders. Our existing anti-combination legislation, in fact, is not only out-of-date but is a positive menace to our industrial and commercial future. We shall deny ourselves the full advantages of the Webb Law unless we repeal the Sherman Anti-Trust Law.

Combination in itself does not, and never has, constituted a danger to this nation or to any other nation, but through ignorant and scheming demagogues, inspired chiefly by political ambitions, the American public has come to view any combina-

tion of business interests as an incubus, regardless of whether such a combination makes for the general weal by eliminating economic waste; and the public apparently has lost sight of the fact that *all combinations should be judged by their operations and purposes*. I am a firm believer in the regulatory efficacy of basic economic laws, and I have confidence not only in the integrity of the majority of our business men, but also credit them with the ability to realize that their prosperity is contingent upon the prosperity of the general public.

Let us not forget that England will make heroic efforts to regain her former trade and also to capture a large part of that controlled by Germany. Her people are united in that ambition, they are willing to make the necessary sacrifices to realize it, and, therefore, they are in a far better position than we to compete for the trade of the world. They have the tremendous advantage of lower costs, and that applies to all important factors in obtaining and holding foreign trade, namely, banking, manufacturing, exporting, shipping, and seamen's interests. All those engaged in such activities are willing to take a smaller margin of profit than their American competitors. They are willing "to play the long game," so to speak, and it would be difficult to exaggerate the importance of this advantage to England.

Comparisons made recently between costs of production in this country and its chief competitors are not encouraging. It is asserted, in fact, by some of our larger exporters that unless they can materially lower their costs of production and delivery they cannot hold their own in competition with foreign manufacturers. British dealers already have regained a lead in some of the more important markets, due to their better preparations for after-war conditions; better shipping facilities, lower freight rates, especially to the more distant markets—such as South America and the East, and to the maintenance of better selling organizations, even under the duress of war. And yet the British Government believes that it is imperative to reduce costs still further, through obtaining greater multiple production in England by encouraging amalgamations and combinations among manufacturing, financial and shipping interests.

Under our present laws it is impossible for an American ship to carry cargo as cheaply as a British or Japanese vessel, due to the

high cost of operation. Whether our government will enact laws that will enable our ships to meet this situation remains to be seen. It is certain that our maritime interests will not attempt to operate any of the new vessels for their own account under the present laws, for British and Japanese owners can under-bid them every time because the British and Japanese laws are not so drastic as our own. Meanwhile we shall continue to pay heavy tribute to England in the form of ocean-freight tariffs.

NEED FOR GOVERNMENT COÖPERATION

It would appear to be clear, even from a cursory consideration of the subject such as this, that we are urgently in need of coöperation, not only among our industrial, commercial, transportation and financial interests, but also between the government and these important elements in our economic life. The most vital problem confronting business, indeed, is that regarding the relations which shall be established in the immediate future between the government and industry.

Stringent government control in peace times would certainly constitute a deadly menace to commercial and industrial interests. It would stifle competition, undermine ambition, and discourage initiative. It would offer no incentive to high endeavor. A reasonable protection of the public welfare by the exercise of a proper coöperation on the part of the government is quite another matter. That would not result in a repression of business, but rather in a relationship under which industrial concerns would remain in private hands; competition that causes economic waste would be eliminated; and capital and labor would each prosper in proportion to its respective contribution to national production, and in proportion to the public interest served.

Under such a system we should, indeed, have national reconstruction—reconstruction which would create understanding and recognition of sound principles and methods, a high sense of justice and fairness, and a general coöperation for the best results attainable for all concerned and for the nation, which has a new and great part to play in world affairs. It would dispel the overhanging menace of impractical idealism which exists at Washington, and to some extent elsewhere, and of which business men must take cognizance. The obvious intention on the part of

some to force government ownership of transportation and wires, if possible, and the announcement of a policy of philanthropic restraint in foreign trade, are but straws indicating the direction of the wind. In pursuit of such economic will-o'-the-wisps, some minds are led astray and would lure us into the bogs of Bolshevism. The facts of human experience and human nature have always proved a safer basis for human relations than the tissue of dreams or the visions of what ought to be. Justice and fair dealing are not impossible in a world of sound economics, and these standards furnish us a sounder platform than parlor socialism or political expediency. If the spirit of common equity and reason can pervade government bureau and legislative hall, as well as business office and bank, we may hope for a readjustment to the conditions of peace which will bring prosperity to our own people of all classes, and render useful service to the entire world.

Combinations for Export Under the Webb Act

By JOSEPH E. DAVIES

Attorney-at-Law, and former Chairman of the Federal Trade Commission

THE report of the Federal Trade Commission on Coöperation in Foreign Trade was issued on the thirtieth day of June, nineteen hundred and sixteen. The commission recommended that legislation be enacted to permit combinations solely for export trade, in order to remove existing doubt as to the legality of such organizations under the Sherman Law.

PROVISIONS OF THE WEBB ACT

Largely as a result of this recommendation, the Webb Bill passed the House of Representatives on September 2, 1916. The original House bill contained two clauses that negatived the purposes of the bill. It was provided that export trade should not "be deemed to include the production, manufacture, *trading in or marketing within* the United States or any territory thereof, of such goods, wares or merchandise or any act in the course of such production or manufacture." Again it was provided that such action should be confined to such as "does not restrain the export trade of the United States." It would be manifestly impossible to obtain goods for export in the United States unless the organization were to trade or market in the United States. Further, it would appear that such a combination to be effective must "restrain export trade." The bill did not pass the 64th Congress.

The bill was, however, passed by the 65th Congress and approved April 10, 1918, with the objectionable features eliminated. In general terms, the act as finally adopted declared that nothing contained in the Sherman Law should be construed as making illegal a combination entered into for the sole purpose of engaging in export trade or acts in furtherance thereof providing there were no resulting restraints of domestic trade, or of the export trade of a domestic competitor, nor any act of any kind whatsoever which artificially or intentionally enhanced or depressed prices, substantially lessened competition or otherwise restrained trade in

the United States. The prohibition of Section 7 of the Clayton Act, prohibiting certain intercorporate stock holdings, was lifted so far as the acquisition of stock in such an export combination was concerned, if no domestic restraint of trade resulted. The prevention of unfair methods of competition in export trade against competitors engaged in export trade was vested in the Federal Trade Commission, even though such methods were employed without the territorial jurisdiction of the United States, as was also the general administrative supervision of the provisions of the act. The public records of the commission, consisting of the articles of incorporation and by-laws of the various combinations, show that American business men have been prompt to avail themselves of the provisions of the law.

Up to this date of writing, the statements required by this law have been filed by the following organizations:

Allied Construction Machinery Corporation
 Allied Machinery Co. of America
 Allied Mfgs. Export Corp.
 Allied Sugar Machinery Corporation
 American International Steel Corporation
 American Paper Exports, Inc.
 American Parchment Export Co.
 American Steel Export Co.
 American Steel Export Co.'s Brazilian Corporation
 American Webbing Manufacturing Export Corp.
 Amsinck & Co., G. of Mexico, Inc.
 Automotive Products Corporation
 Copper Export Assn., Inc.
 Cosmo Trading Co.
 Cranz (Inc.) F.
 Cranz Importing Co., F. E.
 Deco Co.
 Deister Miners Supply Co.
 DeLima, Correa & Cortissoz, Inc.
 Dodge & Seymour and
 Dodge & Seymour (China, Ltd.) a subsidiary company

Douglas Fir Exploitation & Export Company
 Dunnellon Phosphate Co. (The)
 European & Far-Eastern Sales Co. (Inc.)
 Export Trade Association (Inc.)
 Factory Products Export Corporation
 Fajardo Bros. & Co. (Inc.)
 Franklin International Corp.
 Galban Noecker & Co. (Inc.)
 Galena Signal Oil Co. of Brazil
 Harper & Co., Locke T.
 Herzberg & Son, B.
 Holsam Co. (Inc.)
 International Clearing House of New York (Inc.)
 Levy Co. Inc., A. A.
 Manufacturers Agents Co. (Inc.)
 Markt & Hammacher Co.
 Markt & Schaefer Co.
 Maxim Munitions Corporation
 Mexican Importing & Exporting Corporation
 M. P. Trading Co. Inc.
 Muller, Maclean & Co. (Inc.)
 Pan-American Exporters, Inc.
 Parsons & Whittemore (Inc.)
 Redwood Export Co.
 Semtec (Ltd.)
 Simmons Co., Thomas W.

Southern Products Co.
 Sparks & Co., W. J.
 Strong & Trowbridge Co.
 Sydney Ross Co.

Texas Co. (South America) (Ltd.)
 The

United States Handle Export Co.
 U. S. Office Equipment Export Assn.
 United States Paper Export Association
 Zaldo & Martinez Export Co. Inc.
 Zoccola Co. (Inc.)

An examination of the charters filed would indicate that a great many, perhaps a majority of the combinations covered by them, have not complied with the act inasmuch as they are not *solely* engaged in exporting from the United States to foreign nations as the act requires.

It appears that export houses engaged in import as well as export trade seem to have found difficulty with the provision of the law which makes it apply solely to combinations for export. Many export houses, it would also appear, have filed reports out of an excess of caution in the fear of the penalty imposed by Section 5 of the act.

Since the passage of the act, the associations which have attempted to qualify under its terms for the most part have been in the corporate form. There are some few instances, however, of those who have merely combined, by contract or otherwise, under the terms of the law as "two or more persons, partnerships or corporations." While statements filed, generally speaking, have been designed to comply with the act, it is an interesting fact that by far the majority have failed to get completely within the terms of the act in that they have been organized for purposes in business other than that of solely engaging in exporting from the United States.¹ This is particularly significant, for unless they are formed under the express provision of the law, *solely for export trade*, they acquire no protection and are amenable to the provision of both the Sherman Law as to restraints of trade, or conspiracies to monopolize, and as well to Section 7 of the Clayton Law, forbidding interlocking stock ownership, as provided therein.

SALIENT FEATURES OF TYPICAL ORGANIZATIONS

It may be of interest to note some of the salient features of some of these typical associations. The capital authorizations vary as

¹ See *Annual Report Federal Trade Commission* 1918, p. 40.

do also the requirements as to the amounts to be paid in under the charter as a prerequisite to doing business. The following are typical:

	<i>Authorized Total Capital Stock</i>	<i>Amt. With Which Begun Business</i>
Allied Sugar Machinery Corporation	\$200,000	\$2,700
American Steel Exports	500,000	2,000
Douglas Fir Exploitation & Export Co.	200,000	Has been in business several years
Manufacturers Agents Co. Inc.	2,000,000	maximum 200,000 minimum
American Paper Exports	1,500,000	800,000
Automotive Products Corp.	500,000	
American International Steel Corporation	1,000,000	2,000

Stock and Voting Power. The voting power of the stock of these organizations varies. Some give to each share of stock one vote. Others provide that voting power shall accrue alike to each stockholder regardless of the amount of stock owned. Still others base the control and voting power upon the proportion of production of each member the preceding year, or on combined considerations of proportionate production and stock ownership.

Limitations on Membership. There are also varying provisions with reference to eligibility for membership. Some of the organizations, such as the Copper Export Association, Inc., open their membership to all producers. Others limit membership to manufacturers or distributors of a certain class or of a certain territory; while still others prescribe that no other members shall be admitted except upon consent of the original signatories, who prescribe the terms of admission.

Limitation to Prevent Single Control. In order to prevent control of the association through the acquisition of stock by any one member, one lumber export association has made the following provision:

All of the stock owned by the stockholders in this corporation other than one share each, to be held by the stock trustees of this corporation, shall be assigned to and held in trust by the stock trustee or trustees whose power to sell and dispose of such capital stock so held in trust shall be limited to sales thereof to legitimate manufacturers of lumber on the Pacific Coast only, and such sales shall be further restricted so that no one manufacturer individually or through affiliated interests shall ever become a majority owner or holder or be able to exercise a dominating control of the capital stock of this corporation. Whenever any

person, firm or corporation shall make application to become a stockholder in this corporation and to purchase one or more shares of its capital stock and such application is approved by the Board of Trustees or such committee or officer as it shall thereunto authorize, a share or shares of the stock so held by such trustee or trustees shall be cancelled and a like number of shares in lieu thereof issued to such purchaser who shall forthwith endorse and deliver the same to said stock trustee or trustees to be held with like stock by such stock trustee or trustees. No sales or transfers of the capital stock of this corporation to any other than an actual manufacturer of lumber on the Pacific Coast shall be valid and in case of the death of any stockholder or the dissolution of any corporate stockholders or the insolvency or bankruptcy of any such stockholders or in case any stockholder voluntarily for a period of one year cease to continue in the manufacture of lumber, then and in that event this corporation shall have the right to call in, retire and cancel the capital stock so held by such stockholder upon payment to the heirs, executors, trustees or successors in interest of such person or corporation to an amount equal to the par value but not exceeding the par value of such stock.

Manner of Making Sales. Differing methods of making sales have been adopted, usually depending upon the intent of the organization as to whether it shall be purely coöperative on an expense basis only or whether it is designed to produce profit for the exporting corporation. One organization provides that all the foreign business of its members shall go through the association, invoices to be charged to the association and by it charged to the foreign purchasers, collected from them and when collected paid back to the proper party, minus a fixed percentage to be agreed upon from time to time sufficient to approximately cover the cost of carrying on the association. The cost of carrying on the association is to be prorated among members on the volume of sales of each party through the association, bad debts being treated as joint expenses. Funds are advanced by each member on which they are entitled to charge interest at 6 per cent until the proper adjustment can be made, this interest being recognized as part of the expense of the association.

Another association provides that its board of directors shall fix a minimum price for export sales. The executive committee then makes quotations within its discretion but not below this minimum price. The association receives 3 per cent on the amount of the sale from the mill accepting the order, such commission being known as a "flat brokerage" and is entitled to a further "overage brokerage" of one-half of the difference between

the price quoted by the member mill and the price at which the product is sold to the customer. The flat brokerage is to be paid ninety days after the shipping date of the order whether or not shipped, and the overage brokerage fifteen days after the due date of the invoice. Each member quoting includes the flat brokerage in his quotation.

Still another export association guarantees payment of all accounts sold by it and agrees to pay the manufacturer upon receipt of settlement from the customer, in any event not later than ten days from the date of receipt by the company at its office of complete shipping documents, the company deducting its commission which is $2\frac{1}{2}$ per cent of the F. A. S. mill value. A portion of this commission is to be spent in developing and increasing export trade. Others are to be assigned on the basis of quotas determined by the board of trustees. All export sales are to be made exclusively through the company. Orders assigned to a manufacturer are to be considered accepted unless objection is filed within five days from date of order. Contracts containing the above provisions are made for one year continuing in force thereafter unless terminated by ninety days' notice. Disagreements are to be decided by a two-thirds vote of the board of trustees.

Penalties and Settlements of Disputes. Provision is made quite commonly that failure to perform on the part of members shall be subject to penalty and that disputes shall be determined by the board of directors. Thus one association makes provision that in the event of the failure of a stockholder to observe and comply with the requirements and the conditions of the by-laws of any requirements of the board of trustees adopted in pursuance thereof or to carry out any provision or agreements of the contracts or to discharge any obligation to it, the board of trustees may repay or tender the stockholder the book value not exceeding the par value of said capital stock, less any indebtedness owing to the corporation by said stockholders, and may thereupon cancel said stock and re-issue said shares of stock either to the stock trustee or trustees held by said trustee of stock or to some person, firm or corporation who may become a stockholder in the corporation. In the event of the cancellation of the shares of stock it is provided that all right and interest of the original holder in and to the shares of stock shall immediately cease and determine and the

same shall be forfeited to the corporation. Another provides that if a member is unable to make delivery as agreed and an extension of delivery is not satisfactory to the vendee, the corporation may cancel the purchase and place the order with another member mill at prices, terms, etc., not exceeding those of the original sale. The original mill must under such circumstances pay one-half of the flat brokerage, the new mill paying the regular brokerages the same as if the order were received originally by it. In case of unreasonable default in delivery, a member is not entitled to further orders until the delinquency is made good.

Division of Profits. Provisions with reference to the payment of dividends upon the stock vary, dependent upon whether the purpose of the association's activities are to bring profits to its membership apart from the organization or to declare the same in dividends to stockholders.

The Douglas Fir Exploitation & Export Company provides that the board of trustees may declare dividends out of the surplus profits whenever deemed advisable but such dividends shall be limited to 7 per cent per annum upon the capital stock actually paid in. All surplus earnings after payment of operating expenses and the creation of a fund to meet estimated business losses and the payment of the 7 per cent dividend, are to be devoted to ways and means of increasing and extending foreign trade in Pacific Coast forest products provided, however, that the board of trustees may in their judgment create a fund for repaying the principal of the capital stock subscribed for in the corporation to the company so subscribing and paying to the said subscribers and their successors in interest.

The Manufacturers Agents Company, Inc., provides that the board of directors may fix the sum reserved as working capital and determine what part of the accumulated profits shall be declared in dividends to the stockholders and also determine the use of any surplus or net profits over and above the capital stock paid in.

The American International Steel Corporation provides that the board of directors may declare dividends out of the surplus or net profits at such times as they may determine and before payment of any dividends they may set aside out of the surplus or net profits such amounts as they think proper as a reserve to meet contin-

gencies or for equalizing dividends or for any other purposes deemed beneficial to the interest of the corporation.

The Copper Exports Association, Inc., provides that cumulative dividends at the rate of 7 per cent per annum and no more shall be paid on the preferred stock but none on the common having no par value of which each member is to have one share. Before declaring any dividends, the directors may reserve out of accumulated profits such sum or sums as they deem proper for a reserve fund to meet contingencies or for other purposes they think conducive to the interests of the association.

THE FUTURE OF COMBINATIONS FOR EXPORT

What the actual results from these organizations may be, it is too early to predict. The intensity of the nation's effort in the winning of the war, the scarcity of shipping tonnage for commercial use, the disruption of channels of international commerce, are all still felt; and operations planned are scarcely under way. The limitations in the law itself in the provision that makes these associations apply solely to export trade also tend to impede the most rapid progress, as most enterprises can be most effectively conducted by the integration of import with export. The provisions of the act in the public interest looking to the protection of the domestic consumer within our own territorial limits from the effect of these associations must also be closely scrutinized in the planning for foreign markets. Unfair methods of competition are inveighed against by the law in foreign commerce even though projected beyond our territorial boundaries, if inimical to domestic producers in the same manner as they are prohibited by the Federal Trade Commission Act, in interstate commerce. These provisions all call for careful scrutiny and judgment in the planning as well as in the projection of these enterprises.

An export agreement among western fir producers prior to the passage of the Webb Act proved highly profitable in increasing output and receipts, and it may be expected that similar results will accrue under these more favorable conditions. Conditions, obtaining in foreign parts, which brought about combined purchases there as against competitive sellers from the United States may perhaps be fairly expected to be offset by these organizations of sellers.

One of the distinctive features of international commercial rivalry prior to the war was the existence of the cartel, the comp-toir and the "ring"—which gave great advantages to our competitors in the world's markets, certainly as against the smaller manufacturers who could not afford the hazard of foreign markets, with attendant overhead expense, credit risk and extended organizations. It may be that these organizations in modified form will be supplemented in some fields by government monopolies. If that be the development, it will probably be through still further extension of the principle of the Webb Act that we will be enabled to hold our own in the markets of the world.

The Trade Association as a Factor in Reconstruction

By FRANKLIN D. JONES

Counsellor at Law, Washington, D. C.

ONE of the basic changes arising out of the war the world over has been the far-reaching control of industry by government. In our own country, the business man during the war has in a large measure had the conduct of his business taken from him through government control of raw materials, fuel, transportation, distribution, prices and capital. The heavy and sometimes clumsy hand of federal regulation has been felt by every manufacturer and tradesman. Competition in many industries has been paralyzed.

The first step in reconstruction is the restoration of open and wholesome competitive conditions. In our own country, happily, economic and political thought in the main favors it and governmental action is already directed to that end. Industrial democracy giving to every man the opportunity to win business success on merit and efficiency is still to be the purpose of government regulation. Monopoly and combinations in restraint of trade are still taboo, not only for their inherent viciousness but because their inevitable effect when consciousness of power is increasing in the great groups of our citizenry is to lead to socialism. If industrial power becomes too greatly centralized, the people as the possessors of sovereignty,—as the last and ultimate authority,—will either exercise a control as heavy as that felt during the war or take possession for themselves. It is vitally to the interest of industry, therefore, that competition free, fair and unrestricted be reestablished. Just as the trade associations, through their war service committees, rendered invaluable service to the government and their industries during the period of government control, so now they can become a great and constructive factor in the maintenance of competition.

Unfortunately the trade association of the past has concerned itself largely with such matters as control of prices, curtailment of production, or division of territory, and in so doing has run

afoul of the law. Yet its action only too often arose from the sheer desperation of its members over conditions which threatened the ruin of the industry. Competition was blind. Manufacturers were selling by guess work. Secrecy and bitter trade enmities were the rule. As a result, some industries were in a state of chronic and chaotic disorganization. Manufacturers inveighed against such conditions as the result of a competitive system forced upon them by the law. Such conditions, on the contrary, were wellnigh as foreign to a status of fair, wholesome competition which the law seeks to preserve, as the monopoly which it endeavors to prevent. The government was partly to blame for this situation, as it devoted its efforts largely to the prevention of monopoly without seeking to strike at all its causes. The Federal Trade Commission, however, promises to become a great factor not only in the prevention of improper restraints upon competition but also in the elimination of the unhealthy and unsound conditions of competition which breed the restraints.

But great changes are seldom superimposed. The democratic, individualistic spirit of the bulk of American business men, finding its expression through the working organizations of their industries, the trade associations, can and ought to demand that American industry be placed upon an efficient, healthy, competitive basis in the period of readjustment ahead. In so doing, they will fight for individual opportunity and against socialism which is the sure offspring of centralized industrial power. The trade association can become a great force working for industrial democracy, yet bringing to the manufacturer enduring financial benefits which in the long run outweigh the danger and uncertainties of the use of practices counter to the spirit, if not in violation of the law.

ELIMINATION OF SECRECY

Secrecy in competition has always fostered unhealthy conditions. It has denied to every business man the facts upon which he can guide his business efficiently. Without the facts as to prices and production conditions, he has been forced to carry on blindly, the easy prey of buyers who desired to play the jealousies and suspicions of competitors against each other. Instead of facts, he has had a tangled mass of rumors, hearsay statements

and partial data from which to attempt to draw the truth. Price discriminations in violation of the law are almost inevitable under such conditions. Ill-will between buyer and seller are a sure result. As a result prices in more than one industry have gone to ruinous levels, and competitors have adopted such trouble-making and perilous expedients as gentlemen's agreements. Yet much of this could have been avoided by a frank, open exchange of information.

It would be the ideal plan were the government to collect and disseminate figures as to prices and production both because the authenticity of the data would be more certain and the possibility of its misuse eliminated. Such a system was at one time contemplated by the Federal Trade Commission. The Department of Agriculture already furnishes such a service to growers. But in the absence of governmental action, the trade association can be the vehicle by which the same result can be accomplished. The history of some twenty or more trade associations within the past few years has clearly demonstrated that manufacturers through their association organization can exchange information as to their prices and their production so that every manufacturer can have facts instead of suspicions upon which to base his independent competitive policy absolutely free from any concert of action within the condemnation of the law.

During the next year or two of readjustment involving sudden and radical changes, a knowledge of facts will be vital. Figures on production, sales, prices, and demand conditions can be and have been compiled in weekly or monthly reports to members and basic facts prevailing in the industry summarized for the benefit of the business man. The inevitable effects of such a system is to tend to create more stability in price and more normal conditions generally in the industry. It eliminates the disastrous competition arising from distrust or guesswork and supplants it with straight business competition based on facts. It creates the status of competition the law is designed to protect and removes in large measure the danger of monopoly. Unfortunately the business man who makes a fetish of so-called business secrets, fails to appreciate the advantages following from such a policy and by his refusal to coöperate creates the conditions he is first to denounce.

COST ACCOUNTING AND UNFAIR PRACTICE

Not all ruinous competition, however, is the result of secrecy in trade. A good part of it springs from ignorance. The manufacturer who does not know his costs and who sells by guess work is a dangerous element in his industry because his sales policy can sometimes force an entire industry into selling its output at ruinous levels. Selling below cost is recognized as an unfair method of competition. Trade associations in coöperation with the Federal Trade Commission have already made tremendous strides in impressing on their members the necessity of knowing their costs. But it is a work which must constantly be kept up if competition is not to sink back into the old ways.

The trade association, by persuading each of its members to install methods whereby he may know what he can, from a sound business standpoint, do to meet competition, will have gone a long way toward maintaining that status of competition which the law encourages. The action of the Reconstruction Congress of American Industries at Atlantic City in December of last year, in adopting resolutions favoring the adoption of uniform cost accounting in every industry in the country, emphasizes the great importance of cost accounting as a factor in stabilizing industry. But uniform cost accounting should be very carefully distinguished from uniform costs. The association which engages in the latter is restricting competition and will inevitably come into collision with the law.

Unfair methods of competition have long been recognized as the favorite weapon of those aspiring to monopoly. Such methods are now expressly prohibited by the Federal Trade Commission Act. In many industries today there are questionable practices in use, some of them carried down through the years and often forced upon the industry by the action of the minority of its members. Such practices can be eliminated only by the united action of an association acting if necessary in coöperation with the Federal Trade Commission.

Secret commissions, misbranding, bribery and the like are typical. In one industry, secret commissions to buyers have in some instances within the past few months been given to an amount equaling 20 per cent of the value of the sale. Obviously such a practice forces high prices or inferior goods on the public,

demoralizes the trade and prejudices the best interests of the industry and of the public. The trade association offers the machinery for the elimination of such practices. And is it not far better for an industry to do this itself than to be forced to do so through hostile actions by the government? All it takes is a little give and take, a little belief in each other and an elimination of the old spirit of secret, unfair competition. The National Varnish Manufacturers Association and the Paint Manufacturers Association of the United States acting together, for example, have established an unfair competition bureau which within a year has done really remarkable work in ridding the industry of the practice of paying secret commissions to buyers, a practice which had been forced on the entire industry by the action of some of the trade. The National Association of Printing Ink Makers has maintained a similar bureau. The Silk Association of America has done much in eliminating misbranding in the silk trade.

EFFICIENCY IN PRODUCTION

Aside from any question of the perpetuation of competitive conditions in trade, it is beyond dispute that American industry must direct its efforts towards securing the greatest possible efficiency in production and distribution. Considerations of world competition as well as domestic conditions demand it. In some industries, the small manufacturer has not the capital to maintain the most efficient standards of production. To him in particular there is an increasing need for the coöperative action which the trade association can furnish.

Probably no one factor enters so directly into a determination of efficiency in production as labor costs. Labor with a growing class consciousness is demanding new rights or privileges. The rising standards of wages and living in the old world remove the obstacle to broad spirited constructive action on the part of capital. The new republic, Czecho-Slovakia, has already adopted a law for an eight-hour day and insurance against unemployment. The wage scales in England and France have increased tremendously. Strikes are occurring the world over for an eight-hour day. To American industry, the situation is at once a warning and an opportunity. Without the fear of low priced foreign com-

petition, the American manufacturer can better the working and living conditions of his employes, and from satisfied workers secure a maximum production.

The seriousness of the labor problem demands the united consideration of leaders of American industry. The trade association can be the agency through which the problem is worked out constructively in each industry. It is the organization of an industry. The experience of its members with successful profit-sharing plans, bonus systems, housing plans, and other measures to improve the living and working conditions of labor, can be made mutually available, and problems peculiar to the industry can be given scientific study.

The trade association could perform no greater service than in dispelling the old feeling of hostility and replacing it with a feeling of trust and coöperation between labor and capital, which alone will make for the most efficient production. It will require the diplomacy, the powers of head and heart of the leaders of the industries whose united judgment should be placed at the disposal of their industries through their organization, the trade association.

SCIENTIFIC RESEARCH

In America, only the great corporations have been able to indulge in the expense of laboratories and research. The small manufacturer by reason of this fact has been greatly handicapped in competition. In France, the trade associations (Syndicate Patronaux) support lecture courses and professional schools, maintain laboratories and issue prizes for valuable research work done. Among trade associations in this country, particularly those containing the small independent manufacturers in their membership, similar action would be of tremendous value. Scientific research has not only aided, it has created new industries during the war.

A very few associations, among which may be mentioned the National Cannery Association, the Paint Manufacturers Association of the United States and the National Association of Tanners, have each established coöperative laboratories to their great benefit. If such an institution is impracticable in a particular industry, at least fellowships can be established in the universi-

ties for special research in the problems of the particular industry. The University of Pittsburgh has a special organization for conducting research work for trade associations. Associations may also utilize the existing laboratories of the government such as the Bureau of Standards and the Bureau of Mines, and by their united action endeavor to secure legislation looking to the establishment of a great national laboratory such as that for which the government of England is making provision.

Such a laboratory would be of inestimable service to the small manufacturer. One of the foremost activities of Germany leading to her great industrial development was her intense interest in industrial research. American industry, if it is to do more than follow other nations, must develop vigorously this phase of its activities. In this movement, the trade association can lead by unifying and organizing trade sentiment in each industry.

ELIMINATION OF WASTE

We have now reached the state in national development where we should carefully husband our resources. Some trade associations have already taken important action in this direction. Just before the war, an association of steel manufacturers employed an expert to devote his whole time to searching out and eliminating waste in their respective plants. In every industry, there are methods costly and wasteful in operation. In one it may be an over-extension of the idea of service; in another the use of an excessive number of grades and sizes; in another a lack of coördinated information on credits; in another an extravagant use of samples.

The work done by the Commercial Economy Board under the Council of National Defense during the war shows the possibilities of standardization and economy. It has been estimated that this board, coöperating with the clothing trade, has saved nearly two million yards of cloth by the reduction of size of samples alone. The implement industry and the wagon industry have made great savings through the adoption of standard types. The sure effect of the successful adoption of such methods is to reduce the capital investment in raw materials and finished products and to free the manufacturer's capital for productive purposes. The mutual exchange of information as to wastes, methods

of correcting them and their study by experts can be accomplished by an association at little expense and with lasting benefits to its members.

EDUCATIONAL WORK AND LEGISLATION

Education of the public and of the trade reacts most favorably on an industry. In recent years, trade associations have just begun to appreciate the benefit of publicity. The growers of California and Florida, the Portland Cement Association and several of the lumber associations have spent many valuable page advertisements in introducing the public to the associations and the uses, old and new, for their products. Here is a great field for the trade association, scarcely touched as yet, for increasing demand and securing the volume which makes for lower prices and the development of the industry. There is a competition between industries just as vigorous as competition between individuals in which coöperative advertising can become a great force.

At least one association, the National Wholesale Grocers Association, has also adopted the long-sighted policy of educating the customers of its members on the use of more efficient trade methods. It has distributed thousands of pamphlets among retailers dealing with such subjects as, for example, the care of perishable foods. Increase in efficiency of any of the factors of distribution will inevitably redound to the benefit of the entire industry, and it is a work the trade association can well undertake.

The next few years will see legislation of the utmost importance under consideration. The business man has been prone to censure Congress for passing laws affecting him, but often he has made no effort to present facts as to the proposed legislation to the proper authorities in an effective way. Legislation yearly is being enacted on such subjects as taxation, tariffs, workmens' compensation and the like. With the whole world in readjustment and reconstruction it becomes vitally necessary to the business man to be organized to protect his interests in no haphazard way. The trade association representing the interests of a single entire industry is the ideal agency through which the business man may make his influence felt on legislation. The trade association need not be, and it is far better that it should not be a lobbying agency. The day of the lobbyist is gone for-

ever. An association can with much more effectiveness be the means through which facts can be compiled, organized in a comprehensive way and presented to the authorities in such a manner as to compel interest and attention. Such a course will make certain a consideration of the interests of the industry as they relate to pending legislation.

FOREIGN TRADE

The great increase of productive capacity in this country has made essential a permanent substantial addition to our foreign trade. Heretofore, the products of American industry in the main did not greatly exceed domestic demands but in many industries at present, war demands have resulted in the development of production which America cannot possibly absorb. In such a situation, an increased foreign trade is vital.

As soon as the American leaves his country's borders to engage in world trade, a new condition of things confronts him. He faces mass competition,—the fight of industrial interests of one nation against another. The industries of Germany have for a number of years been united into effective organizations called cartels, controlling production and prices. France has *comptoirs*, or great central selling agencies for her industries. Japan, during the war, has been forming similar export combinations and the Board of Trade of England has for two years or more been urging the formation by British manufacturers of the same type of organization for British foreign trade. In some industries before the war, great international combinations dividing territories and controlling prices had been formed. Competition in foreign fields is truly international and due to the absence of any effective regulation by an international body, it is apt to be hard hitting and not always honorable and fair.

Against such competition every American industry should present a united front. The trade association offers the organization through which this can be largely accomplished, provided American exporters can submerge their individualism and appreciate the importance of coöperative action in furthering the national interests of their industry. The government has given its coöperation by the passage of the Webb Act which permits with few restrictions the formation of associations or combinations solely

for export trade. Every trade association should study conditions to determine whether an organization of such an export combination among its members is practicable. Great American corporations do not need the help afforded by it but to the small manufacturer it gives an opportunity to enter effectively into foreign trade and thereby to secure the stabilizing effect of diversified demand with the utmost economy of operation. Already a considerable number of such export associations have been formed. The copper, lumber, paper and steel industries have already been organized. The privileges to combine for export trade permitted by the act are not limited to manufacturers, and other agencies are taking advantage of them. In the lumber industry, the wholesale distributors are forming an export corporation.

Aside from assisting in the creation of strong organizations for foreign trade, the association can assist in many other ways. It has the working machinery for coöperating with government departments in disseminating literature of the departments relative to foreign trade problems. It can aid, through publicity, in the elimination of trade abuses or faulty methods which hamper American trade abroad. It can help in bringing about the fixing of standards of quality for articles for export trade, just as the various trade organizations of Japan are now coöperating with the government in the maintenance of definite export standards in some of her industries. Associations, too, can establish direct personal relationship with the business men of foreign countries. The Illinois Manufacturers Association did a great deal to establish cordial relations between South and North American business men by a tour made by the members of the association through South America several years ago, duplicating on a large scale the common practice of chambers of commerce in this country who visit communities in territory their members serve.

ASSOCIATION OF ASSOCIATIONS

With American industries entering as they are in a large way into world competition, the need for unity of purpose and action necessitates a coördinated organization which will represent them as a whole. Great governmental problems relating to shipping tariffs, commercial treaties and the like, which directly affect all

branches of American industry, will be in process of determination within the next few years. What an effective aid in their solution would be a great organization so builded that it could speak for separate industries or for American industry as a whole. And what a controlling factor it might become in shaping the foreign trade policy of American exporters along constructive lines, aiding in the elimination of abuses, arbitrating differences, and building up an international good will for all the products of American industry. The trade association—representing as it does the united interests of an entire industry, is the ideal unit upon which to base a great and efficient organization of this character. The Reconstruction Congress of American Industries was to a large degree made up of official representatives of trade associations. The possibilities of such an organization in domestic affairs alone are shown by the importance attained by the deliberations of this meeting. In Germany, trade associations and other interests have for years been organized into a great association known as the Hansabund. In France, great unions of trade associations or syndicates have been permitted since 1884 and several such as the Union of the Metallurgical and Mining Industries are of an importance that can scarcely be exaggerated. A similar organization in America founded on right principles and having behind it the unlimited resources and resourcefulness of American industry could become a great constructive force in national and international affairs. In the absence of international regulation of international trade, it is a national necessity.

The Federal Trade Commission and the Meat-Packing Industry

By WILLIAM B. COLVER

Chairman, Federal Trade Commission

ON July 1, 1917, there became available, by act of Congress, an appropriation of \$250,000 to the Federal Trade Commission and another of \$50,000 to the Department of Agriculture to be devoted to a study of the advancing costs of foodstuffs and especially to an inquiry as to whether there was reason to believe that the production, preparation, storage distribution and sale of foodstuffs were subject to control or manipulation.

The general subject was subdivided, and wheat, flour and breadstuffs, meat, canned fish, canned vegetables and other kinds of food were treated separately and the department and the commission arranged a division of the tasks. As to meat, the Department of Agriculture undertook the study of the cost of production of meat animals, their transportation and sale, feeding in stockyards and certain economic questions. The Federal Trade Commission undertook to follow the animals from the stockyards through the processes of slaughter to the preparation of the various products; and the Department of Agriculture undertook the study of the disposition or marketing of the products and by-products.

The Federal Trade Commission went back about thirty years and began its inquiry as of a time when the meat-packing industry was just beginning to evolve its present form.

The commission found and reported its belief that beginning with the "dressed-meat" or "Allerton" pool in 1885, there has existed, through one device or another, up to the present time, combination and agreements between the principal packing concerns of the country, and that at present this agreeing group consists of Swift & Company, Armour & Company, Morris & Company, Wilson & Co. (Inc.) and The Cudahy Packing Co.

The commission reported that the control of markets and market conditions now rests largely upon an agreed division of purchases of live stock in definite and fixed percentages. The five packers deny this and assert that, in fact, they are in real competi-

tion one with the other and that any apparent uniformity of purchase percentages arises from "plant capacity"; each concern buying enough live stock to meet the needs of its plant.

This claim is contrasted by the commission with the fact that, during a whole year, the five packers, buying in the twelve greatest live stock markets, varied less than one per cent from a fixed percentage of cattle purchase, though the variations in the various markets were often very wide and though during one week so few as 60,006 cattle were sold on the twelve markets as against 190,686 sold during another week.

The commission reported its belief that, through ownership or control of stock yards and mediums of market information; through "split purchases," "part purchases" and "wiring on," together with agreed division of purchases, the market and market conditions were controlled both as to the sale of live stock by the producers and the purchase of meat products by the consumer.

The details of all this—the effect on competitors, the financial ramifications, the relations with railroads and the operations of the packers in foreign countries—are too complex to be set out within the limits of this article. They have been published as a public document by the commission.

The commission called attention to the fact that the huge surpluses arising from the operations in meat packing were being invested in other related and unrelated enterprises to such an extent and to such a progressively increasing extent that actual control of the nation's food supply in the hands of the five packers—or three of them—is entirely probable. These enterprises are quite aside from the "by-product" articles and relate largely to substitutes for meat.

The commission concluded that, as to meat, the unfair advantage of the five packers over producer, consumer and competitor, lay largely in the control of means of transportation, marketing and storage, i.e., through the control of stock cars, refrigerator cars, stock yards, cold storage houses and market information. It concluded further, that the integration with the meat-packing business of scores of unrelated food enterprises was not in the public interest.

The commission did not, however, recommend the public ownership nor operation of the packing houses. In one of the pending

bills it is proposed that both meat packers and the facilities for transportation, storage and marketing be placed under federal license, much as was advocated as long ago as in 1904 by President Roosevelt and his then Commissioner of Corporations, James R. Garfield, with respect to interstate corporations.

The commission recommends further that Congress show its determination to go to any lawful extent necessary to reestablish competitive market conditions, by "authorizing an appropriation" by which the facilities for transportation, marketing and storage might be acquired by the government by lease or purchase and operated either by lessees or licensees of the government or by the government itself.

However it should be noted that the pending legislation carries no appropriation whatever and therefore no step further than the licensing of the conduct of packers and the use of the facilities is properly under discussion. This is rather an anti-climax in view of the uproar that has been raised about "government ownership" but it is the simple and unsensational fact.

It has been charged that the Federal Trade Commission was prejudiced and unfair in its investigation and especially that it refused to receive witnesses offered by the packers or to permit packers' attorneys to cross-examine. Chief among these complainants is Swift & Company.

The fact is, as to Swift & Company, it never offered a witness and never requested that its attorneys examine or cross-examine. It addressed one telegram to the commission long before the investigation was authorized by congress offering access to its books (already provided for by law) and couched in language suggested in writing by its attorney. The purpose of this telegram, as stated by the attorney in his memorandum, was to abort the investigation. The only other communication from Swift & Company was another telegram months after the investigation had closed and a summary of the report had been made public.

The commission has made no suggestion of limitation of profits or invasion of property rights. It does believe that a restoration of free market conditions and the disentanglement of the meat-packing business from substitute food and other business enterprises would be in the public interest and that such reasonable and conservative remedies applied now will avoid the necessity for more drastic measures later.

The profits of the five packers reduced to a claimed per-pound basis are cited by the packers as proof that there is competition in buying and selling. The profits subject to correction, are as follows:

ESTIMATED PROFITS

	Armour	Swift	Morris	Wilson	Cudahy
1912	\$5,702,000	\$8,745,000	\$1,813,000	\$†1,326,000	\$1,129,000
1913	6,158,000	9,449,000	1,917,000	†1,364,000	1,329,000
1914	7,640,000	9,651,000	2,206,000	†1,209,000	1,402,000
1915	11,156,000	23,387,000	2,321,000	†2,464,000	724,000
1916	22,849,000	24,195,000	4,890,000	5,314,000	3,511,000
1917	*27,137,000	47,236,000	8,012,000	8,319,000	4,935,000

RATE OF ESTIMATED PROFIT ON NET WORTH (CAPITAL STOCK AND SURPLUS)
TAKEN AT BEGINNING OF FISCAL YEAR

1912	6.0%	8.6%	6.9%	†	7.1%
1913	6.1	8.7	6.9	†	7.8
1914	7.3	8.5	7.5	†	7.9
1915	10.2	19.8	7.5	†	4.0
1916	19.2	19.1	15.0	14.5%	19.4
1917	*19.8	33.4	22.6	29.6	23.2

REPORTED VOLUME OF SALES

1912	\$263,307,000	\$300,000,000	\$134,430,000	†	\$90,444,000
1913	349,897,000	400,000,000	165,909,000	†	104,409,000
1914	354,801,000	425,000,000	158,983,000	†	109,121,000
1915	380,157,000	500,000,000	177,040,000	†	116,162,000
1916	479,969,000	575,000,000	219,781,000	\$186,998,000	133,961,000
1917	*577,366,000	871,276,000	268,792,000	225,000,000	184,811,000

* Not including South American business.

† Figures known to be unreliable.

‡ Rates not available.

It is claimed that their profits reflect only a greatly increasing volume of business and a unit-profit, figured on a claimed per-pound basis, is so small (a fraction of a cent a pound) that only enormous volume of business, utilization of by-products, broad spread of comparatively low overhead and economical operation make any return on investment possible.

Small independent competitors, however, without great volume of business; with higher unit overhead; buying livestock in the same markets at the same prices and selling meat in the same markets and at the same prices; with handicap instead of advantage and without the economies claimed for minute integration are found to make satisfactory return on net worth.

If 1917 represents the claimed delicate balance between profit and loss, then how can these five packers have run up from small investment to enormous net worth without the investment of new capital but by the "ploughing under" of undivided profits? For example the original Armour investment in 1868 was \$160,000 and by October 27, 1917 the net worth of the concern was shown as \$156,126,680 while during that time some \$27,828,000 had been withdrawn as dividends.

The Government and the Packers

By L. D. H. WELD

Swift & Company, Chicago, Ill.

ONE of the principal reconstruction problems is the question as to how far the government is going to continue the regulation that it has assumed over the industries of the country during war times. The most vital problem is perhaps in connection with the railroads, but the government has extended its functions during the war emergency to a surprising degree in the regulation of prices, the limitation of profits, and the control of industry in general. Many of these restrictions have, of course, disappeared, and the remainder, which were assumed under war powers, will automatically disappear when peace is finally signed; but the experience during the war has accelerated the general tendency towards government supervision of industry which has been developing during the past generation.

The demand for a permanent policy of regulation of industry is especially evident in connection with the packing industry. Since the signing of the armistice there have already been introduced into both Houses of Congress bills providing for the regulation of this industry. These bills confer upon the government the most radical powers of control and even profit and price regulation, and have been receiving serious consideration in the form of hearings before the House Committee on Interstate and Foreign Commerce and a Sub-Committee of the Senate Committee on Agriculture and Forestry.

Although these bills apply to the packing industry, they are of interest to every business man in America, because if Congress should adopt the principles involved with respect to the packing industry, there is no reason why they should not be extended to cover any other industry and trade in the country. Although the proposed legislation can never pass in its present form, it is worth while for us to consider what these bills mean, because there are many people in the country who believe that this legislation should be passed.

INVESTIGATION AND REPORT OF THE FEDERAL TRADE COMMISSION

During the spring of 1917 the President ordered the Federal Trade Commission to make an investigation of the production and distribution of foodstuffs, and during the early summer of that year the commission began its investigation of the packing industry. This investigation has been going on practically all the time that the United States has been in the war, while the packing industry was making an enviable record of war achievement. Swift & Company, at least, promised hearty coöperation with the Federal Trade Commission and promised to throw open its books and accounts for examination.

Public hearings were held under the direction of a special attorney, who practically placed himself in the position of a prosecuting attorney. Although the packers were at liberty to appear at these hearings, subject to the cross-examination of this attorney, it was definitely announced that the packers would not have the right to cross-examine the witnesses produced by the Federal Trade Commission; that they would not be permitted to cross-examine their own witnesses, nor to produce witnesses to controvert, through cross-examination, the statements made by witnesses produced by the Federal Trade Commission.

The examiners took from the private files in the offices of the packing companies, only such scraps of correspondence as would appear to make out a case against the packers. Oftentimes a single letter would be extracted from a file, whereas other letters and documents in the same file would give an entirely different meaning. Even among the letters taken there were many which would controvert the contentions of the commission.

For example, in Part Two of its report on the packing industry, page 89, the Federal Trade Commission describes the practice known as "wiring on"; it is said that, when a shipper is dissatisfied with the prices offered him in one market, and ships to another, the packer's buyer in the first market wires ahead to the same packer's buyer in the second market, stating the price bid at the first market. The Trade Commission says that, "The packer buyers at the second market bid at prices no greater, and often less, than those offered the shipper at the first market, thus causing him to lose the freight and the shrinkage in the weight of his stock." It is, of course, perfectly legitimate for the buyer in the

first market to wire the buyer of the same company in the second market this information, just as is commonly done in all industries, but the Federal Trade Commission tries to make out that it is an illegitimate practice in the live stock trade. The statement that "The packer buyers at the second market bid at prices no greater, and often less," is false. The Trade Commission introduced in its report copies of letters taken from Swift & Company's files which apparently support this statement; Swift & Company has copies of letters which were also taken by the Trade Commission's examiners, which show instances of higher prices paid for animals in the second market than were paid for them in the first market. These the Federal Trade Commission did not publish in its report.

In pages 132-133-134 of Part II of the report, the Trade Commission charges that the large packers had an agreement fixing the price of lard compound, so that identical prices were charged by all competitors. The inference is, of course, that there was an illegal agreement. The truth of this matter was brought out by Mr. J. Ogden Armour in his testimony before the House Committee on Interstate Commerce in which he explained that the price of lard compound at the time under discussion had been fixed at the request of and in coöperation with the Food Administration as a part of its food control program. In other words, the agreement which forced all dealers to sell at the same price was one brought about by the government itself. The Federal Trade Commission failed to mention this fact, and therefore put the packers in an utterly false light.

The Federal Trade Commission bases its charge that the five big packers have a monopoly primarily on the fact that the percentage of live stock receipts bought at the various markets by each packer remains fairly constant from year to year. To a person outside the industry, this phenomenon appears to be fairly convincing; to a packing-house man, however, it is perfectly evident that the fairly constant percentages are a result of keen competition among the packers. Swift & Company, for example, is so jealous of its position in the market that it has kept a record for years of the percentage of receipts that it has purchased, and compares this with the percentages bought by other packers. This company does not intend to yield ground by even a fraction

of one per cent, if possible, and as a matter of fact has increased its percentage since 1913, according to the Trade Commission's own figures, so that it killed about 90,000 more cattle in 1917 than if it had not increased its percentage.

As evidence that there must be an agreement to divide receipts, the Trade Commission reproduces a letter written by P. D. Armour to his uncle J. Ogden Armour from Denver, referring to the situation there as on a "fifty-fifty basis." This merely meant that Armour was aiming to buy at least 50 per cent of the receipts and that he knew that Swift & Company was naturally aiming to do the same thing, as these are the only two large packers having plants at Denver. The Trade Commission introduced a table of percentages on hog purchases at Denver, because it showed that Swift and Armour had bought nearly equal percentages; but the commission failed to introduce similar tables of percentages on cattle and sheep purchases, which it had in its possession, and which showed that Armour had actually been buying only about 45 per cent of the cattle receipts as compared with Swift's 55 per cent, and that there had been striking variations in the percentages of sheep purchased. The inclusion of these tables would have entirely destroyed the effect which the "fifty-fifty" letter was supposed to create.

In connection with the Federal Trade Commission's failure to establish its contention that the five large packers have an agreement to control purchases, sales or prices, it should be noted that the heads of the large packing companies in printed statements and in their testimony before Congressional committees have made the absolute statement that they have no agreements in restraint of trade of any kind and that they are in open and active competition in the purchase of live stock and in the sale of meats.

The contention of the packers themselves that they are in open and active competition is borne out by many facts which were not mentioned at all by the Federal Trade Commission in its report. Perhaps the most convincing evidence of competition is that the profits of the large packers are so small that they could be wiped out entirely without noticeably affecting prices, and that these profits often turn into losses. During the year ended June 30, 1918, there were 19 out of the 52 weeks in which Swift & Company either made no money at all or actually lost money on beef. The

profit varied from 74 cents per hundred pounds (about three-fourths of a cent a pound) during the week of greatest profit, to a loss of \$1.17 per hundred pounds (over one cent a pound) during the week of greatest loss. It is a pretty poor combination that cannot bring about a more favorable effect on profits. The most convincing evidence that was ever found against such corporations as the Standard Oil Company and the American Sugar Refining Company was that which showed the increasing of profit margins at times and in localities when and where competition was lacking. Such a study, if made of the packing industry, would give evidence of the most severe competition and of the absolute lack of any agreement to control prices.

Many other evidences of competition are also omitted from the Trade Commission's report. For example, it is not mentioned that dealers and speculators always stand ready in every market to buy live stock if the price falls below what the live stock is worth. It is not brought out that the so-called small packers are not only very large in number but that many of them are of very respectable size and that they are flourishing and growing in number. Many of these smaller packers appeared voluntarily before Congressional committees in January, 1919, and surprised members of Congress by telling of the immensity of their business and of the satisfactory conditions prevailing. The Federal Trade Commission does not mention the keen competition that is perfectly evident in the sale of meats; that the different packers have branch houses in the same city, that each has its own corps of salesmen and delivery trucks, and that the retail butchers shop around from the branch house of one packer to the branch house of another, finding differences in price for the same quality of meat. Many other evidences of competition might be cited.

RECOMMENDATIONS OF THE FEDERAL TRADE COMMISSION

The Federal Trade Commission did not recommend that the packing industry itself be taken over and operated by the government, but it assumed that the alleged monopoly was due to the control by the packing concerns of the facilities for transporting and marketing live stock and meats. It therefore urged that live stock cars and refrigerator cars, stock yards and cold storage branch houses, now owned by the packers, be taken

over by the government. In general the net result of such a program would be in no way to take away monopoly power, if such really existed, and would merely dissipate and disorganize marketing facilities which are now operated with highest efficiency, and which it has taken the packers generations to develop.

As for refrigerator cars, these were built by the packers because the railroads refused to furnish this expensive equipment. Each of the large packers has a well-organized transportation department which keeps track of its cars throughout the country, sees that they are moved with the greatest expedition, and that they are distributed through the country in accordance with the needs that vary with live stock receipts and with changes in the demand for meats. Swift & Company, for example, has today only about 80 per cent as many cars as it needs, and nothing could possibly be gained by placing these cars under government operation or even under railroad operation in the way of improving the service to packers and to the public. At the very time that the Federal Trade Commission was coming to its conclusions with regard to refrigerator cars, the Interstate Commerce Commission, after a long and thorough investigation, issued a decision (July 31, 1918) in which it specifically upheld the present system of packer ownership, and said that this system had been of the greatest benefit to the country at large. The Interstate Commerce Commission also found that the packers have been operating their refrigerator cars at a financial loss for several years.

As for the government acquisition of stock yards, it has developed in public hearings in Washington that the packers have become interested in these yards, not only because of the possible financial return, but more especially because of the necessity for furnishing such facilities and efficient operation as would insure an adequate supply of live stock to keep their packing houses operating at full capacity. Swift & Company, at least, is perfectly willing to relinquish its ownership in the stock yards in which it is interested, providing that efficient operation can be continued.

The taking over by the government of the packers' branch houses is manifestly out of the question. These branch houses are practically refrigerated salesrooms, and not freight houses, as contended by the Chairman of the Federal Trade Commission in his testimony before the House Committee on Interstate Com-

merce. Goods have to be kept on hand in large quantities and for indefinite periods and have to be sold and delivered in small quantities every day. It also requires the keenest and most energetic management, as well as ability born of long experience, to operate a branch house successfully, especially as it deals almost entirely in highly perishable goods which have to be moved rapidly.

PROPOSED LEGISLATION

Bills have been introduced into Congress, based on the findings of the Federal Trade Commission, and intended to carry out the recommendations enumerated above. The bill introduced in the House (H. R. 13324, 65th Congress, 3rd Session) by Mr. Sims, on December 10, 1918, provides for government acquisition of live stock and refrigerator cars, stock yards and cold storage branch houses, and also provides for the licensing of packing houses, and gives the government blanket and unrestricted powers to do whatever it sees fit with regard to the packing industry. There is absolutely nothing to justify the singling out of the packing industry for such a remarkable and unprecedented method of control or for such a radical departure from American ideals. The bill even aims specifically to give the government the power to dictate what commodities may or may not be handled by the packers. It also gives the government the power to take away the license and thereby put any concern out of business.

The bill which has received consideration in the Senate (S. 5303, 65th Congress, 3rd Session) was introduced by Mr. Kendrick January 7, 1919. This bill does not go so far in providing for government acquisition of cars, stock yards, and branch houses, but provides for a most drastic system of regulation, under license, with the power to revoke the license at will, and is therefore just as objectionable as the bill introduced into the House. It is absolutely unthinkable that either of these bills can ever be passed in anything like their present forms,—and yet it is of extreme significance that they are receiving serious consideration. The public probably does not realize what a revolutionary thing it would be to pass either of these bills, affecting as they do one of the largest and most vital industries in the country.

The demand for special legislative treatment of the packing industry results from a common belief that there is a combina-

tion in restraint of trade among the five largest packers, and that meat prices are too high or that live stock prices are too low (depending on whether one is a consumer or a farmer), because of the large profits of the packers. No satisfactory legislation can be passed on these assumptions. The large packers are not only in active competition with each other, but with hundreds of smaller packers and local butchers.

The fact that profits amount only to a fraction of a cent per pound of meat absolutely disproves the common belief that profits account for high prices of meat or low prices of live stock. The price received by the packers for meat and by-products is never more than enough to cover the cost of live stock and low operating expenses, and to yield tiny unit profits. Because of large volume of business, these small unit profits, which have practically no effect on prices, yield in the aggregate a satisfactory return on investment. But packers' war profits have not been out of line with profits in other industries; they have been no more than sufficient to finance large inventories at extremely high prices, and they have hardly furnished sufficient protection against the fall in prices, and hence in inventory values, that is sure to come.

Regulation of the Perishable Food Industries After the War

By G. HAROLD POWELL

General Manager, California Fruit Growers' Exchange

SOON after the armistice was signed the license regulations of the Food Administration were gradually abrogated, except as they related to domestic food stuffs in short supply, or to foods that were exported in large volume. The license regulations were designed to eliminate injurious speculation, hoarding, extortionate profits, unfair and wasteful trade practices, and to direct the course of food stuffs in straight lines from producer to consumer through the essential trades without unnecessary cross trading.

The Food Administration created a sentiment among the parties interested that supplemented the powers of the Lever Act. It held conferences with representatives of the trades, appointed advisory committees of the producers and the trades, and appointed trade leaders in the Food Administration to interpret the problems of their industries to the government. By this method a patriotic sentiment for national service was developed on the part of the public at large and particularly among those who were subject to the Food Control Act. It was the policy of the Food Administration, on the signing of the armistice, to relieve the public of war-time restrictions, return the trades to a peace basis at the earliest moment, and, at the same time, protect the public against abnormal rises in prices. The Food Control Act ceases to be effective when the existing state of war between the United States and Germany shall have terminated.

When it was announced that the special license regulations governing the distributors of perishable foods would be abrogated, general regret was voiced by dealers in fruits and vegetables, poultry, dairy products and fish, that the reforms which were introduced into the trades as a war measure should be lost. Notwithstanding the reaction against further governmental interference in business, protests were heard in all parts of the country against a return to peace-time distributing methods, and a sincere inquiry was begun into permanent legislation that might be

enacted for the protection of the producer, the distributor and the public at large against the unfair, wasteful and discriminatory practices that were not uncommon in pre-war times in the transactions of the producer, and of the distributing trades.

Responsive to this sentiment, the California Fruit Growers Exchange, the American Warehousemen Association, and the National League of Commission Merchants have already gone on record in favor of legislation which will make permanent the beneficial ends attained, as a war measure, by the Food Administration. After an experience of eighteen months in handling the Perishable Food Division under Mr. Hoover's direction, and as a representative of one of the largest shippers of perishable foods in the world, the writer is in sympathetic accord with the aims referred to.

FOOD WASTAGE IN PEACE AND WAR TIMES

Before the war there was not always confidence in the fairness of perishable food transactions; the producer distrusted the commission merchant, the dealer complained of the packing and grading by the producer, either party or both may have complained that the implied contracts of sale were not always carried out, and, while disputes between the parties at interest were unadjusted, car loads of fruits and vegetables may have stood on the tracks and been lost through deterioration or at least seriously impaired in quality. There were enough of these disputes in the press to create a prejudice against the perishable food industries and to affect adversely the standing of the honest men in the trade, the average member of which has a standard of integrity in his dealings that will equal that of the men in any other business.

Many of the difficulties in the distribution of perishable foods are inherent in their perishability; that is, the condition of the foods is frequently in dispute on arrival in the markets, and the condition may have been affected by climate or other factors over which no one has control. Others are due to disputes between sellers and buyers over the grade of the food; others to the rejection of cars by the consignees on the score of condition or because the market is lower; others because of carelessness in defining contracts between parties at interest, while some of the trouble is due to unfair and dishonest practices by unscrupulous shippers or

receivers. It was towards the correction of these evils in the perishable food industries that the Food Administration directed its efforts during the war, the license regulations having been drawn after extended conferences with leaders of the different trades, who gave their best efforts in suggesting regulations that would eliminate the abuses, reduce the waste in food stuffs and give greater confidence in perishable food transactions.

The perishable food business is one of quick action. These foods must be sold at just the right time to avoid disaster from poor condition. A delay in the settlement of a dispute between shipper and receiver, the rejection of cars by the purchaser, the holding on track in warm weather before unloading, the lack of ice for refrigeration, the congestion of terminal facilities—all of these factors cause losses in perishable foods, and when added together take an enormous annual toll from our food supplies.

During the war, many of these losses were entirely avoided, or at least were greatly reduced, because the license regulations of the Food Administration forced the quick unloading of perishable foods after arrival in market, the prompt acceptance of cars, or their quick rejection, and the settlement of disputes by arbitration after the cars were accepted. As a result of these regulations, perishable food distribution was freer from abuses than in any pre-war period; the losses were never so small; the disputes between the parties interested were quickly handled; and there was more confidence in the integrity of trade practices than in any former time.

With the abrogation of the license regulations and the ultimate disappearance of the Food Control Act, there will be no practical way of correcting the pre-war trade abuses or dishonest practices or to avoid the waste in food stuffs. Competition again will force dealers to follow practices that are questionable, the public will lose the confidence which it had gained in the integrity of the trades, and the benefits gained through governmental coöperation and supervision will be lost. The resort to the courts for damages against a dishonest dealer is too slow and expensive to be effective. A quicker method of handling disputes and of passing the produce through the avenues of trade is necessary.

I have not definitely formulated my own judgment as to the method of federal supervision or to the extent to which such over-

sight should go. Whether to enact legislation that is mandatory on all distributors and put them under license regulations, or whether to enact a law that gives the distributor the choice of taking out a voluntary license, is a very practical and fundamental question. Theoretically, the public interest would be best served if all shippers and distributors were under a uniform license system and had to conduct their transactions in a similar manner, and I would favor such a plan if the legislation could be enacted. The difficulty in such a plan is, first, to be able to pass such legislation through Congress; and second, the equally practical difficulty of building a government force, with experience and judgment enough to handle the multitude of disputes and problems that need to be decided by sound practical sense. In handling perishable food difficulties, the judgment of the men who come in contact with the trade problems is the factor on which the success or failure of the plan is likely to be decided. No matter how comprehensive or sound the law, its practical working will depend on the fairness and soundness of the acts of the government representatives.

There is a strong reaction in the public mind against further interference in the affairs of business, except as it is necessary to protect the public against flagrant abuses. The trades are antagonistic to the making of detailed reports, to the readjustment of methods of accounting, and to the fear of trouble because of the difficulty of conforming to the requirements of government regulation. There are thousands of members of the trades who have not installed comprehensive methods of accounting, and yet who are successful merchants. To these men governmental regulation, with the accompanying reporting system that has been a part of all regulatory efforts to date, is a veritable nightmare. The average member of the trade is more fearful of the report system than of the effect of regulation. The dishonest man in business is afraid of both.

On the other hand, I am convinced that the government, in coöperation with the parties interested, can work out simple regulations and simple reports that would not be burdensome to the trades, that would in the end prove beneficial and which would protect the trade and the public interest alike. It would make the average man play the game squarely, it would relieve him of

the effect of unfair competition, and it would save millions of dollars worth of food that is now wasted annually.

GOVERNMENTAL SUPERVISION AND VOLUNTARY REGISTRATION

A more practical method of governmental supervision is a voluntary registration of the members of the trade on the declaration by the registrant that he will conform to the regulations of the government after enrollment. Under this plan, the Secretary of Agriculture should be given the power:

1. To facilitate the distribution and marketing of perishable food products and to aid in reducing loss, delay, waste and controversy in their movement and sale; to establish uniform standards for perishable foods shipped in closed packages in interstate and foreign commerce, the use of the standards to depend on the choice of the shipper rather than to be obligatory; the Secretary of Agriculture issuing the standards and the rules and regulations making them effective after consultation with the interested public.

2. To inform the public of practices that are wasteful and unfair, after advising the public, as a result of investigation and of conference, of methods that are economical and fair.

3. To make the adoption of the rules and regulations to prevent wasteful, unfair and discriminatory practices, elective with the parties interested rather than mandatory and to license or register all persons who voluntarily elect to adopt the standards and regulations in their interstate and foreign business. This establishes an honor roll among the members of the trades and this roll is known to all who transact business with shippers or receivers. This voluntary method would also be applicable to intrastate as well as interstate business.

4. To cancel or suspend the registration of any person who violates the conditions of his voluntary enrollment and to publish the cancellation with the reasons for the same. This cancellation would not deprive the person of the right to transact business except under the government standards and rules. It takes him off the honor roll and the public is informed of the reasons.

5. To inspect perishable foods when requested by an enrolled member, and to certify to an allowance from a fixed price on account of deterioration or grade under which a sale has been made; and when both principals to a transaction request an arbitration,

the findings, if not accepted by the parties, shall be *prima facie* evidence in any court as to the allowance made.

I would also have the Secretary of Agriculture appoint permanent committees from the parties interested who could be called by him for advice and suggestion; or who could on their own request appear before the secretary and advise or suggest matters affecting the different industries. And committees should be appointed in each market who would act as advisors to the government representatives in handling trade matters. The war has shown that it is possible to bring about a sympathetic and practical coöperation between the government and the public at large. This relationship should be maintained in peace times. It is equally helpful to those who administer governmental affairs to the parties interested. Coöperation rather than antagonism is needed in governmental and public relationships.

I am convinced that legislation embodying the principles outlined would give to the public the coöperation of the government and the industries in raising the standards of perishable food handling; that it would establish a better standard of public confidence in the transactions of these industries; that it would insure the honest and decent man in business the friendly attitude of the public and protect him against the unscrupulous and dishonest man whose transactions often color public sentiment. Could the parties interested agree that legislation, at least as broad in scope as I have outlined, were in the public interest, I am sure that it would go far in perpetuating the beneficial ends attained by the United States Food Administration as a war emergency. Later on, if more comprehensive legislation is needed it can be built upon the experience of a voluntary system of supervision. The great majority of the trades, I am convinced, would welcome a voluntary system of regulation and would give it their earnest support. The unscrupulous merchant would be advertised to the public, because his name would not appear on the honor roll of the government.

Who Should Fix Resale Prices?

By CLAUDIUS TEMPLE MURCHISON

Assistant Professor of Economics, Hunter College, New York City

SHOULD the power to fix resale prices be lodged wholly with the manufacturer, or wholly with the dealer? This seems to state the problem of price maintenance as it is generally thought of in the present controversy. To deny the wisdom of both alternatives in the advocacy of a compromise between the two is the purpose of this paper.

The power of price maintenance is demanded only in connection with goods which are of the identifiable sort, and associated in their resale either with the name of the manufacturer, or with his trade-mark or brand. It would apply only to those commodities which are for the most part distributed through the conventional wholesale-retail channels. Within these limitations would be included probably more than half the volume of the country's retail trade. The majority of grocery commodities, excepting green goods, and the majority of drugs would be included, and smaller but nevertheless impressive proportions of ready made clothing, dress goods, toilet articles, shoes, hardware, jewelry, and novelties. In addition to virtually all of the country's specialty manufacturers, all the retail stores and wholesale houses are vitally concerned as is of course the entire body of the public.

PROBLEM OF PRICE MAINTENANCE

Into this field of such wide and numerous interests, price maintenance has only recently entered as a problem of real importance. Its entrance may be explained as being due to a broadening of the functions of the manufacturers. They formerly were limited to producing commodities and transferring them to commission men or jobbers where they disappeared from sight and interest. Today we often find the manufacturer of specialties attempting to bring within his range of vision and influence not only the wholesale distributors, but also the retailers and ultimate consumers.

¹This discussion is a fragment of a larger work by the author in *Resale Price Maintenance* now being issued by the Columbia University Press.

This broadening of function has been made possible by the vastly improved facilities and methods of advertising and transportation. In some cases it may be said that the manufacturer has reached that point where he combines within himself virtually all the functions of producer and salesman, even though he continues to make use of the jobbers and retailers.

This increasing control by the manufacturer over the destinies of the commodities which he produces has been facilitated by the agency of commodity standardization. The commodity is standardized in every conceivable way. Each unit is a perfect replica of every other unit. To these uniformities of quality, quantity, form, function and carton many manufacturers are adding price uniformity, maintaining that the efficacy of national advertising and the degree of public appreciation is thereby increased. It enables the manufacturer not only to emphasize various utilities, but also to emphasize attractiveness of price. Thus more effectually can a sense of real value be planted in the buyer. Undoubtedly to the great mass of the public there is a strong appeal in the one-price-to-all policy, especially so if there is present a conviction that the one price always commands the utilities desired. As the reputation of a standardized good increases, the price naturally becomes associated in the consumers' minds with the other characteristics which regularly identify the good.

It is asserted that when a commodity reaches this stage where its qualities and price are widely known and associated, it becomes especially subject to the evil of price cutting. The public, having associated for a long time a given commodity with a given price, will immediately detect a lowering of price and so confine their purchases of that commodity to the retailer who has cut the price. The effect is to compel competing retailers to meet the cut or else discontinue handling the commodity. In case there are any exceptions, they carry the good only as a necessary evil and handle it half-heartedly, preferring to offer substitutes where possible. Eventually the price cutters themselves, having exhausted the advertising value of the cut price, will lose interest in the commodity and either drop it or attempt to displace the demand for it by offering substitutes which afford bigger profits.

THE EVILS RESULTING FROM PRICE CUTTING

The evils which are said to result may be summarized as being: First, a decline in the value of the stock owned by dealers who are in the realm of influence exerted by the price cutters; second, a growing reluctance on the part of dealers to handle the commodity, their offering of substitutes, and a consequent decline in sales of the discounted commodity; third, losses suffered by the manufacturer and jobbers through the declining demand from retailers; fourth, inability of the public to secure conveniently the commodity of their choice, accompanied by the necessity of having to accept inferior substitutes.

To prevent price cutting, manufacturers resorted to many devices, the chief of which are: First, the manufacturer grants to such dealers as are willing to maintain the fixed price a liberal rebate on the list price, such rebate payable only when the goods are sold. Any variations from a fixed price entail forfeiture of the rebate. Second, many manufacturers have refused to sell at all to those dealers guilty of cutting prices below the standard. Some have gone so far as not only to refuse to sell to the offending dealer directly, but also to bring pressure to bear on all jobbers and retailers to refuse to supply the offender, thus making it impossible for the price cutter to renew his supplies from any source. Third, prices have been maintained by causing to be incorporated in the contracts of sale special provisions by which the dealers bound themselves to observe a fixed price. Fourth, by making conditional sales in which title to the goods sold to dealers remained in the manufacturer, and passed to the dealers only upon the completion of the resale made at the fixed price. The manufacturer reserved the right to demand the return of all unsold goods, upon the failure of the dealers at any time to maintain the price. Fifth, the use of a license agreement whereby the dealer is regarded merely as an agent or demonstrator without title in the goods. As agent he must sell at a stated price. His profits are in the form of commissions. Sixth, by affixing to the good or its container a statement to the effect that a certain price must be observed, the implication being that the use of such a notice made of the transaction a conditional sale, which bound the dealer to the fixed price. Seventh, a claim on the part of the manufacturer of patented or copyrighted goods

that the usual patent or copyright rights included the right to fix a resale price and to compel the observance thereof.

Virtually all these methods have in whole or in part been adjudged illegal by the supreme court, and in so far as they still exist, they are with very few exceptions merely nominal. Apparently no dependable price maintenance weapon is now available. Moral suasion is slightly efficacious, and the withholding of patronage from price cutters seems under certain very limited conditions to be legal. Yet this is by no means absolutely certain. It seems hopeless to expect the elimination of price cutting in the absence of special federal legislation to that effect.

THE STEVENS BILL AND RESALE PRICE CONTROL

Such legislation has been proposed in the form of the well-known Stevens Bill. Generally stated, its chief provisions are:

1. In any contract for the sale of trade-marked or branded goods the manufacturer may require the observance by dealers of a fixed price, provided that he has not a monopoly of the articles belonging to the same general class of merchandise, that his brand or trade-mark is registered with the Federal Trade Commission, together with the price lists, and that such contract permits a limited number of seasonal or disposal sales (two annually) in case the manufacturer does not choose to repurchase the goods himself on thirty days' notice from the dealer.

2. Emergency circumstances such as bankruptcy, fire, withdrawal from business, commodity deterioration, etc., may justify divergence from price only upon the approval of the manufacturer who demands thirty days' notice of such contemplated action, and who reserves the option to repurchase the goods in case he so desires.

The passage of this bill would clothe the manufacturer with unlimited power of resale price control. To his economic justification of this measure the manufacturer adds an ethical justification. It is argued that any given trade-marked commodity owes its existence to the enterprise and business ability of the producer. Upon it he expends his fortune, his energy, his business reputation. As the market is conquered, and as demand increases, the consumers begin to learn the manufacturer's name and trade-mark. The latter come to be associated with the commodity in the mind of the individual. In proportion to the number of individuals thus affected, the value of the trade-mark grows. It stands as an identification mark by which they may always recognize the

article and select it, rather than accept some competing commodity. If the good will value inhering in this trade-mark is the property exclusively of the manufacturer, and if price cutting by dealers constitutes an exploitation of this property, such an act must be looked upon as being ethically reprehensible.

The manufacturers are joined in their advocacy of the Stevens Bill by many dealers. They see in the device the advantage of greater stability in prices. Sharp price fluctuations eliminated, the perils of merchandising are largely diminished. Competition in that case would become a process involving service and efficiency rather than prices. With the standard price, selling is simplified, and profits are assured. Also the national advertising, financed by the manufacturer and thought to be dependent on the fixed price, is highly valued. Price maintenance would also diminish largely the fears entertained by the great mass of retailers of the growing power of the modern giants in retailing, the chains, department stores, and mail order houses. It is maintained that these largely owe their development, not essentially to economic superiority, but to their command over large capital united with their destructive policy of price cutting. Their price cutting is charged with being reprehensible in motive, being only for the purpose of deceiving the masses into the belief that their prices are uniformly lower than those of their competitors, whereas in fact their prices on unidentified commodities and on private brands which they push as substitutes are not only maintained but in many cases are actually excessive. Thus they recuperate from the losses on standard commodities, and at the same time injure the trade of the average retailers who can neither compete on the standard commodities nor afford to carry private brands.

PRICE CUTTING v. PRICE MAINTENANCE

Voices from among the consumers in behalf of price maintenance are not totally lacking. They emphasize the advantages to the consumers to be derived from standard commodities. The manufacturer freed from price cutting perils is in a position to offer better quality and is even enabled to enjoy economies which will encourage general and uniform price decreases. Furthermore they oppose the practice which imperils the life of commodities prized by the public.

The opponents of price maintenance make an issue of the truth of the above assertions and arguments. They deny that price cutting has the disastrous effects claimed, and assert that it is resorted to for the most part because of sound business reasons. As proof of this they are able to indicate numerous commodities, the popularity and distribution of which have rapidly increased rather than diminished despite their subjection to general and persistent price cutting. They attribute the disappearance of certain commodities from the market and the embarrassments of certain manufacturers, not to price cutting, but to inferiority of values offered, or to general inefficiency. They maintain that the existence of superior efficiency which is creative of economies in operating expenditures, and the presence of low cost conditions, constitute not only a valid defense of price cutting but also a moral insistence upon it.

To the claim that price cutting is an exploitation of the good will of the manufacturer, the opponents reply that they too have a good will which is based on a reputation for offering maximum values at minimum prices, and that to protect this good will they should not be prevented from passing to the consumer the benefits of economies achieved by them. They emphasize the fact that they own the goods which they sell, and that in their acquisition they paid the price which the manufacturer demanded. Why should the manufacturer who has received his price and who has given up title to the goods and responsibility in the goods be empowered to dictate to the present owners the conditions of resale?

Furthermore, the opponents of price maintenance profess to see in the use of the fixed price coupled with the enormous amount of advertising which it engenders an unwarranted encroachment on the legitimate functions of the retailer. The retailer is not a mere automaton engaged in the process of breaking up large quantities and distributing them in small units among a ready made clientele. He is a creator of utilities even as the manufacturer. Moreover recent phenomenal developments in merchandising would seem to demonstrate that it is no less responsive to applications of skill and judgment, art and science than is manufacturing. As regards capital expenditure, assumption of risk, and perplexing difficulties to be overcome, modern retailing

need not necessarily differ greatly from manufacturing. In no small number of cases these characteristics predominate on the side of the retailer.

Not only would price maintenance be an encroachment upon functions valuable to the public and involving vested interests of vast proportions, but it would bring the entire machinery of commodity distribution virtually within the control of the manufacturing end of industry, an obviously incongruous and dangerous development. The power to fix the resale price carries with it the power to fix dealers' profits. These would be raised or lowered not in accordance with dealers' interests but in harmony with those of the manufacturer. Concerted action on the part of manufacturers well entrenched behind a powerful consumers' demand created by intensive national advertising, could easily make of dealers' profits simply a form of wages, and in addition even dictate the methods and conditions of resale. The old American Tobacco Company methods are sometimes referred to.

The consumers opposing price maintenance would add to the above items the conviction that the fixed price would be tantamount to monopoly price, and that this would lead to a generally increased cost of living. This result would express itself in two ways: 1. Elimination of the present economies which are enjoyed through the patronizing of the cut price stores. 2. The establishment of conditions which would encourage the fixing of prices on a uniformly higher scale than now obtains.

The more one studies the irreconcilable arguments of the supporters and opponents of price maintenance, the more one is convinced that neither side is wholly wrong, nor yet wholly right. Impartial study of available data seems to justify the taking of a middle ground.

DEGREE OF CONTROL OVER RETAIL DISTRIBUTION

Is there economic justification for broadening the manufacturer's functions to include a degree of control over retail distribution where the manufacturer himself does not sell directly to the consumer? Obviously no such right arises from the consideration alone of the merits of his product or trade mark, because these receive their valuation and are paid for in the sale of the goods to the dealer. If such a right exists it must be sought for

not in the presence of certain qualities which the manufacturer has attached to his product, but in any service which the manufacturer may render in aiding the retailer to find a market.

Through different types of advertising such aid is often given. As regards most standardized commodities it is more effective and economical for the producer to advertise than for the dealer. A commodity of small unit value which no dealer could afford to advertise may easily justify the expenditure by the producer of hundreds of thousands in advertising. Equally evident is the fact that many commodities could never be manufactured profitably were it not for the large scale production made possible by wide advertising. These circumstances prevailing, it must be admitted that the manufacturer often rightly possesses an interest in retailing methods, but it does not follow that thereby the importance of the retailer is diminished. His functions have not been displaced or even restricted. They have only been supplemented.

The control then which the manufacturer has earned is one purely of degree. The true price maintenance problem is not "Should the manufacturer have the power of resale price control?" but "*To what extent* should the manufacturer have the power?" An answer indicating the minimum and maximum limits of this extent is, for practical purposes, sufficient.

We have noted that in many cases the manufacturer does actually share in the creation of the consumer demand. To be sure he profits from this. But so does the retailer. For the retailer then to take advantage of a mutually created situation to sell at a price which reacts injuriously upon the manufacturer would seem to constitute an act which the manufacturer should have the power to prevent. The question now becomes, "Does every price which is a cut price react injuriously upon the manufacturer?"

TYPES OF PRICE CUTTING

There are two quite distinct and totally different types of price cutting, the predatory type which for greater exactness we shall term "below cost" price cutting, and "profit yielding" price cutting. The former occurs where the dealer cuts to such a degree as to sacrifice all profits on the article cut. His purpose is to make good the loss by gaining increased patronage. The profit

yielding type occurs where the dealer either as a result of economies created by his own efficiency, or as a result of excessive gross profits allowed by the manufacturer is enabled to cut the price somewhat, but continues to make from it a fair profit. By far the greater part of price cutting is of this type. Nevertheless it has been condemned on the ground that it is only the first step in an epidemic of price cutting. But why should it become an epidemic? Why cannot the practice of price cutting be confined to that type called profit yielding?

Granting for a moment that this can be done, what would be the effect? It would amount to putting a premium on retailing efficiency, and encourage a general diminishing of prices in proportion to such efficiency,—a result highly to be desired by consumers. Among the price cutters themselves could appear no motive eventually to discontinue handling the good, and with respect to their competitors only the inefficient would be adversely affected. Losses to the manufacturer from their disaffection would be more than met by increased demands from the efficient. Yet it does not by any means follow that any given dealer by reason of modified price cutting privileges based on this principle could monopolize the sale of the discounted commodities in his community.

Taking an average competitive district under present conditions, we find the facts supporting this conclusion. On the city block where the author lives are three groceries carrying in general the same brands, but having totally different price schedules. One maintains prices fixed by the manufacturer; the other two cut prices but not uniformly. The maximum price store in this case does the biggest business, as it gives credit accommodations, makes deliveries, and has a selling force which knows how to please customers. Of the other two, one makes deliveries, but restricts its credit giving, and the third belongs to a chain whose slogan is "Cash and Carry." In these three stores prices vary as one would expect them to vary. Any well-known trade-marked food commodity which can be found in one can generally be found in the others. Yet a price variation in that particular commodity causes not the slightest dislocation in their respective businesses. How ludicrous it would be to insist on absolute uniformity of price in these stores, even though they are less than a stone's throw apart!

PREDATORY PRICE CUTTING SHOULD BE PROHIBITED

It seems safe to state that as a rule no evil can come to the manufacturer from price cutting provided it is not of the predatory type. The power to prohibit the latter should be granted, but with respect to the former no such power should be granted. Not only is it not needed for the manufacturer's protection, but it would lead to positive evils:

1. It would prevent the utilization of any means external to the manufacturer himself by which prices might be lowered. It ignores the various economic conditions in which different retailers are placed, and also the fact that retailers are not the same in business ability, nor are their business opportunities the same. It fails to take account of the varying costs of operation resulting from such dissimilarities. And reliable data prove that cost variation is not confined within narrow limits, but extremely wide ones,—from 10 per cent to 30 per cent.

2. With respect to service involved in retailing, the uniform price fails to take note that some stores are forced by their clientele to furnish prompt and expensive delivery service, are required to give expensive credit accommodations, and to provide costly and elaborate quarters and apparatus for the gratification of their customers. Obviously such stores should be allowed a higher price than the unpretentious establishment in poor and meagre quarters, affording no accommodation whatever, either by way of credit, or delivery, or floor service.

3. It fails to take note of the widely variant transportation charges which the goods have to meet. In the case of long distance transportation of heavy goods, the freight charges would constitute a very large item of expense. Price maintenance would compel all customers to bear the charge proportionally, regardless of their location, and as the territory of distribution widened, the price would come to include a virtual rebate to the more distant consumers at the expense of the others.

4. Unmodified price maintenance would tend to make more easy the attainment without economic justification of virtual monopoly on the part of manufacturers.

It is claimed that all specialty manufacturers would continue to meet competition, that the rivalry between brands and trade-marks cannot be affected by price maintenance. "Why," say

they, "should competition between Ivory Soap and Fairy Soap be any the less with both subject to the fixed price?" The reply is that there is in price maintenance nothing inherently opposed to manufacturers' competition, but admission of this point does not refute the equally evident fact that price maintenance, while not preventing competition, does create conditions which discourage competition. Placing unquestioned responsibility on the manufacturer to fix not only his price to the jobber, but the price to the retailer and the consumer would so simplify the attainment of a combination or agreement that one of a most informal nature between two or three men would in many cases suffice for its realization. The motive for such an agreement between powerful competitors would be ever present. To place this motive within such easy reach of its incarnation would not in the long run be conducive to the best interests either of the public or of the majority of producers. Such a conviction is strengthened by the consideration that price maintenance has advantages only for the manufacturer whose commodity is already well established in the market, as the predatory price cutting is found only in connection with widely known goods. Paradoxical as it may seem, it is not only of value merely to the strong, but what is equally distinctive its value increases in a progressive ratio as the reputation of the producer increases. Price maintenance in the hands of an individual or a group dominant in the market by the power which it affords over retailing conditions gives to its owner an added advantage disproportionate to the justified economic advantage.

5. Further it must be objected that price maintenance donates to the manufacturers full powers over the distributors, but fails to provide for any material restriction of the manufacturers themselves. Not yet can it be said that all virtue resides in the manufacturers, and all vice in the dealers, nor can it be logically maintained that economic forces can be depended upon to govern the producers while the same forces fail utterly in the proper governance of the dealers.

6. One of the gravest objections to be brought against unmodified price maintenance is that it would tend to crystallize the distributive system and make practically impossible any changes that might lessen the cost of distribution. The present "spread"

between producer's cost and consumer's cost is too large. That fact is a matter of grave concern, and innovations aimed at its reduction should not be discouraged. Perhaps the chains, the mail order houses, the department stores, the coöperative associations, and the buying exchanges will contribute somewhat to the solution of the problem. Price maintenance aims a blow at all of them. It is difficult to see how it would fail to oppose every tendency toward transforming the present distributive system or reducing the costs thereof, unless such tendency emanated from the producers or especially favored their interests.

A modified form of price maintenance which is opposed only to the predatory type of price cutting, which permits price variations within the definite limits of cost variations, meets none of the above objections, and as has already been briefly indicated would be productive of positive benefits. It might be attained by placing in the hands of the manufacturer power legally to prohibit the cutting of prices below the margin which covers the cost of handling the commodity in question. A standard form of accounting should be prescribed for all dealers desirous of cutting prices. Upon properly authenticated cost data, periodical classifications of such dealers might be made and minimum schedules of prices arrived at for each class. Rough classifications should also be made of commodities based upon normal differences in rate of turnover, degree of perishability, susceptibility to seasonal demand variations, etc. To each class of dealers should be allotted a corresponding schedule of commodity classifications. In this way both the Scylla of rigid price maintenance and the Charybdis of predatory price cutting may be avoided.

Competition and Combination

By B. M. ANDERSON, JR.

New York City

THE pressure of war emergencies has brought a large part of the world to accept an extreme public control of business and economic activities. So far has this gone in some places and in some industries that it is difficult to distinguish it from state socialism. Public control, involving combination and concentration and systematic organization of industries, has proved more effective during the war than most of us would have anticipated.

The problem is now presented as to whether we shall go back to the old system of competitive free enterprise so essentially congenial to English and American tradition and so well tested in the marvelous development of economic life in England and the United States before the war, or whether, as a result of our war-time experience, we shall seek to preserve a large part of the organization built up by the war. There is a strong sentiment for continuance of the government control of the railroads, and there is a revival of sentiment in favor of large scale industrial combinations subject to government regulation. There is no considerable body of sentiment in favor of the old unregulated monopolistic trusts, but there is considerable sentiment in favor of industrial combinations which shall eliminate competition, and which shall be prevented from injuring the public through regulation by such a body as the Federal Trade Commission. It is worth while, therefore, to reexamine the factors involved in the competitive system, and to see whether the arguments, which English and American economists have commonly offered in favor of competition, retain their validity under present day conditions.

BUSINESS PROFITS AND SOCIAL WELFARE

It will help to get the matter before us if we consider some of the claims made by the defenders of unregulated monopoly at an earlier period in our history, and particularly the claims presented in the once popular prospectuses of the trust promoters. We shall analyze these claims from two points of view; (a) From the stand-

point of the men inside the combination, and (b) from the general social point of view, or the point of view of the country as a whole. In general, under competitive conditions, whatever makes for business profits makes also for the welfare of the country. The successful business man, who is playing the game fairly, is successful because he creates wealth, and creates wealth more efficiently than other men can do it. Where we have monopolistic combination it still remains true at points that business profits are a mark of social service, but at other points this is clearly not the case. In what follows we shall undertake to see how far the interests of the monopolistic combination and the general public are alike or are divergent.

In considering this, we must distinguish sharply the advantages of large scale production from those of combination as such—technical bigness in a given plant is one thing, while the financial consolidation of many big plants is a different thing. A list of the advantages claimed by the trust “promoter” follows:

1. Power over prices; power to raise prices and to keep them steady.
2. Power over labor; power to control unions and to prevent strikes.
3. Power over jobbers and other middlemen; power to compel them to pay promptly; power to refuse to allow their claims for shortages and damaged goods, etc.
4. Power over the producer of raw material (sometimes stated simply as the ability to buy more cheaply because buying in larger quantities).

I assume that little question will be raised but that virtually all these advantages of combination are socially disadvantageous, and it may be assumed that in any new movement of combination under government regulation, the effort will be made to curb the power of combinations at these points. Some question may be raised as to whether the monopolist's power to keep prices steady is a bad thing, although clearly the power to hold up prices in a period of depression is undesirable, since one important factor in relieving depression is such a decline in prices that new buying is called forth.

Concession must be made, too, to the principle that there is

social economy in wholesale buying (item 4 in the list) in so far as it comes from eliminating unnecessary handling of the goods. Of course, where it comes through oppression of the sellers, it is evil. The advantage of wholesale buying is one that does not grow indefinitely. It makes large scale production more advantageous than small scale production, but after a business unit has become large enough to have efficient management and to make purchases on a considerable scale, it does not gain much by further growth, so far as cheap buying is concerned.

To resume the list:

5. The big firm can utilize by-products which are wasted by the small producer.

But this is merely an argument for large scale production. No limit should be placed on the size of the individual plant; but this does not require financial consolidation of many big plants.

6. There is a gain from the integration of different stages in the same line, as, for example, where by combining different stages in the manufacture of steel you are able to put the metal through several processes without allowing it to get cold.

But, pretty obviously, this is again merely an argument for technical bigness of a single organization in a single locality. It means nothing as an argument for combining different plants in different localities. It is, further, in no sense an argument for the combination of *competing* producers in the *same* stage of production.

7. Where you have several competing firms, each will have a few patents covering certain parts of the process of manufacture, while the others will have patents covering other parts of the process. None will be able to use the best methods at all stages of production because of the monopoly by others on the patented processes. If they combine, however, then all plants can use all of the patents.

Plausible at first, this argument, upon analysis, presents curious features. It says in effect: "Monopoly in patents is a bad thing; let us remedy it by getting a monopoly of the whole business!" The logical conclusion of the argument would be the

throwing open of all patents to all producers. It is an argument against the original theory of the patent itself. A patent is useful to its owner only in so far as it gives him a *differential* advantage over rivals who are trying to perform similar services. It presupposes the possibility of competition. If all the producers in a given line are in combination, then the idea, unpatented, would be just as useful as if it were patented. The theory of the patent is, of course, to stimulate invention by giving the inventor a chance at profits from which others are excluded as compensation to him for his risk and trouble as inventor.

Conceding, however, the desirability of having all the producers in a given line make use of all the patents, it by no means follows that combination among them is necessary. The plan of throwing all patents open to all who care to use them upon the payment of a royalty (the same rate to all) to the inventor, would accomplish the end in view equally well, and would leave the spur of competition as a means of forcing into immediate use all really useful inventions. It would further assure the inventor of a real reward when his patent is put into use.

8. Competing firms, it is argued, have large advertising expenses which are counted as part of cost of production, and raise the prices of goods. A monopoly can dispense with much of this advertising. Tremendous figures in dollars and cents are given in connection with this argument, and the implication of a tremendous social waste is seemingly taken for granted.

It may be true that monopolies have to advertise less than competitive firms do and so can save a considerable expense. It is not clearly in evidence, however, that monopolies have refrained from heavy advertising. But granting the theory, it by no means follows that society at large would be saved the sums involved. What competition takes with one hand, it restores with the other. The consumer pays more for the advertised goods; granted for the sake of argument. But he also pays vastly less for newspapers, periodicals, etc. Competition among publishers in expanding their circulations so as to get advertising has compelled them so to reduce the subscription rates to their papers and periodicals that the purchaser often gets them for less than the cost of the paper on which they are printed. The social cost of ad-

vertising is simply the labor of type-setters, the labor of advertising writers, the paper and ink used in printing advertisements, etc.—a vastly smaller cost than the amounts paid for advertising would indicate. And the educational gain that comes from such a wealth of cheap reading matter—making all concessions that any one demands as to the cheap *quality* of much of the reading matter!—is incalculable. Besides, the advertising itself is a real social gain. It stimulates *wants*—and wants are the steam that keeps social progress going. It is as much in the multiplicity and insistence of his wants as in anything else that civilized man is superior to the savage. Advertising, moreover, communicates information. Purchasers and producers do not get together automatically. There is no way by which marketing can be prevented from being an expensive and a difficult matter, requiring the efforts of great numbers of men and the anxious thought and attention of the ablest minds in the industrial world.

9. Combination enables a business to discharge numerous traveling salesmen, and impressive figures have been offered to show how much is thereby saved.

That the combination does save thereby is for the argument's sake admitted, and that there is some social saving, after the discharged salesmen get to work at something else, is also admitted. But it is denied that the social saving is *net* by any means. For the traveling salesman is a dynamic social agent. He spreads ideas; he keeps the trade up to standards; he aids in making the country socially homogeneous; he breaks up provincialism and traditional methods of doing business. He is of special service to young business men in small communities. Moreover, personal solicitation, however costly, is very necessary in many lines of business. This has been strikingly illustrated in the experience of state insurance in Wisconsin.

10. Combinations can save cross-freights, which under a competitive system are likely to occur.

Now it is difficult to determine the extent to which such cross shipments have taken place under the competitive system. The presumption is, of course, that if a New York firm really has goods just as good and cheap as a Chicago firm, it can, with the freight item in its favor, undersell the Chicago firm in the local market.

But the argument that follows applies, whether the amount of cross-freights is large or small. The saving on this point may be big in dollars and cents to the combination; socially considered, it is subject to a substantial discount. The reason is that the railroad business is a business subject to the "law of diminishing costs." Given the expensive roadbed, given the terminals, given the train crews and rolling stock, given the office organization, there is a huge expense, a fixed expense, whether the transportation business done is large or small. A train may run full almost as cheaply as empty. A track may be used twenty times a day almost as cheaply as once a day. Extra business does increase the *variable* expense, but it does not increase that tremendous item in the railroad's bookkeeping, the fixed expense.

This counter argument is, of course, not applicable in a period of war, when the railroads are working at maximum capacity, nor is it applicable in a section where population is dense and railroads normally run at something like full capacity. But in normal times for the great part of the country it is a valid counter argument. The net saving from elimination of cross-freights is only the *variable* expense of the transportation concerned, and not the whole of the freight charges involved.

11. The combination need make no extensions of credit and so gets along with less capital than the separate firms require, thus saving interest.

True, but on the other hand, the jobbers and retailers must then use *more* capital, paying interest for it often at higher rates than the manufacturer charges, so that an even larger interest charge enters into the price that the consumer pays, and there is no social saving of capital.

In general conclusion on this point, it may be said that many of the gains of the combination are clearly socially disadvantageous, representing merely subtractions from the incomes of other elements of society in exact proportion to the monopoly's gain; that many others, in so far as legitimate, come not from combination as such, but merely from large scale production in the single plant; that of those gains which come directly from combination through the elimination of "competitive wastes," virtually all are subject to a substantial discount before they can be reckoned as social gains, and many are socially illusory. Further,

as against these and all similar arguments, are to be put the familiar doctrines of English and American economics as to the stimulating effect of competition, the great mainspring of economic progress, and the fact that, other things equal, size is a handicap, leading to unwieldiness and red tape.

In the argument that has preceded, it has been provisionally conceded that the claims of the trust promoters as to the business gains of combination are valid. But this concession need not be made. It is certainly undemonstrated that any combination has been successful because of its economies alone. The successful trusts have been successful primarily through monopoly which they have secured by means other than the economies of combination, and there are numerous wrecks in the history of trusts in cases where through failure to get monopoly the big combine found itself unable to hold its own with less clumsy competitors. Professor E. S. Meade of the University of Pennsylvania maintains vigorously in the April, 1912, number of the *Journal of Political Economy* that from the angle of business profit itself, the old trust did not make good, and offers detailed statistical evidence for his view.

On the whole, therefore, we conclude that while combination of a technical sort, the combination which makes for large scale production, the combination which makes possible the full utilization of by-products or other technical advantages, may be trusted to go as far as business men care to take it, the public welfare is best served by an avoidance of the financial combination of competing plants, especially when located in different cities, which are engaged in the same stage of production of a given commodity.

FINANCIAL COMBINATION OF WEAK BARGAINERS

Limitations on this doctrine, however, must be admitted. If the unit of production is very small, too small to have satisfactory banking connections, too small to have satisfactory marketing facilities, and too small to have adequate business direction, a certain degree of combination may very well be advantageous. Thus farmers, particularly those engaged in producing perishable products, may well find it desirable to form organizations of sufficient magnitude to enable them to hire a competent business representative and to enable them to ship their products in car-

load lots. It may even be worth their while and of advantage to the community as a whole for such an organization to have representatives of its own in central markets.

Laborers similarly are in general poor bargainers as individuals. Labor organization is essential if laborers are to be able to sell their perishable product, the day's work, on satisfactory terms. With labor organization, something of business ability can be introduced into the marketing of the laborer's product. With the accumulation of reserve funds by the unions, the laborer is placed in a position where he can finance his operations better and need not make a forced sale in an unsatisfactory market.

Such farmers' and laborers' combinations as are here commended need not and should not involve the element of monopoly. An organization of all the producers of fresh vegetables for winter consumption in the country covering Florida, Louisiana, Texas, and other places, might easily become pernicious. An organization of all the laborers of the country might easily become exceedingly tyrannical. In England, organized labor has gained such strength and coherence that it has been able to force upon the industry of England certain exceedingly vicious practices, particularly that of a systematic curtailment of output. Under the pressure of war needs, the English unions temporarily surrendered this practice, but they are now resuming it. We must avoid allowing this principle to go further in American labor organization. Mr. Schwab is giving sound advice to labor here, pointing out that the American business man twenty years ago operated on the same theory, seeking to form monopolistic combinations which would keep prices up by restricting output, but that the American business man has been forced by law, public sentiment, and his own good judgment to surrender these methods. He advises labor that it, too, must eliminate them.

The advantages of financial consolidation to facilitate marketing and to give better credit standing at the banks are limited. In the matter of borrowing, a well organized wholesale dry goods house, with half a million to a million dollars of capital and surplus, can probably borrow as cheaply at the biggest banks of New York as the United States Steel Corporation can. A house with \$100,000 capital might have greater difficulty in establishing a satisfactory New York connection. But size need not go very far in most cases

to give the necessary prestige and stability and business ability which the banker demands.

COMBINATION VS. MIDDLEMAN IN FOREIGN TRADE

Is combination for marketing more necessary in foreign than in domestic trade? The extent to which it is necessary depends very greatly upon the quality and character of the middleman who might be employed in lieu of combination. Commission houses, jobbers and other middlemen provide all the marketing organization which many businesses need. In very many cases indeed, they supply much more satisfactory facilities than a combine could form for itself. Many London commission houses, for example, deal so justly, so uprightly, so intelligently with shippers from the other side of the earth, that those shippers would be ill-advised, as a rule, to establish independent selling agencies in London. So well established is the reputation of these London houses that a shipper in Java or China will regularly "consign" goods to them without prior arrangements. When the goods arrive in London, they will be taken by the London commission houses and sold at once if the market is right, or else made the basis of a loan. The goods may be of uneven quality, in which case the commission house will sort them into different grades, or it may even blend them with products from another country.

Apart from the commission house, there is the "export house." The export house buys and sells on its own account. Such houses may have their own ships as well as their selling agents abroad, and may even engage in banking business as well as in buying and selling commodities. They may have built up through a generation an intimate knowledge of credit conditions in a foreign country which a new combine could not get in a short time. They deal in many commodities, where the combine would deal in only one. They will have facilities for securing return cargos which the combine would lack, and so will have marked advantage over the combine in cheapness of transportation.¹

There is one general consideration which should give us pause in contemplating great combinations, involving many millions of

¹ See the admirable paper by W. P. Goemann on "Coöperative Selling vs. the Middleman in the Upbuilding of our Foreign Commerce," *Economic World*, 1917.

capital, engaging in foreign trade. Individual traders, operating on a moderate scale, are unlikely to lead their governments into political friction with the governments of other countries. If, however, trade is to be organized on a vast scale, with a few great combinations representing England, America, Germany and France, seeking to dominate the various foreign markets, the possibilities of friction are very great. Before the war, England and America largely relied on the merchants' playing a comparatively lone hand, engaging in trade abroad on the same general basis as they engaged in trade at home. Germany, on the other hand, had organized great combinations closely affiliated with the banks and the government whose purposes were as much political as economic, and which indeed often subordinated profit to the prospect of extending German political influence. While this consideration should not lead us to look with disfavor on foreign trade combinations where such combinations clearly serve business ends of a legitimate sort and avoid the effort to secure monopoly, it should still make us cautious. We want a peaceful world after the war.

The Webb Act, authorizing combinations in foreign trade, subject to regulation by the Federal Trade Commission, does not contemplate that such combinations should give American producers monopolistic position in foreign countries. We have no intention of foisting on foreign countries the evils from which we have freed ourselves. None the less, it is probable that the Webb Act would not have been passed but for exaggerated fears of a trade war following German methods after the war, and our complete victory over Germany has removed most of the dangers which the Webb Act was designed to meet. Our Allies, likewise weakened by the war, would not be strong enough to drive us out of foreign markets if they chose, and if we meet them half way in the matter of fair policy in foreign trade, they will have no disposition to do so.

Organization under the new Webb Act has already gone so far that the best public service will consist, perhaps, not in opposing it, but in pointing out certain difficulties which it may encounter and mistakes which it should avoid. It differs from the old combination movement within the country in two important particulars. In the first place, it retains separate management, separate

control, and full competition among the units within the great domestic market. In the second place, though the Webb Act allows combination with respect to marketing of American products in the foreign fields, it still retains a fair field for such American producers as do not care to enter the combine in the foreign field, and it leaves competition between American producers and foreign producers in the foreign field. It amounts practically to a substitution of a producers' selling agency for the independent middleman. It does not involve the elimination of the middleman, if and when he is able to convince the American producer that he can perform services for him more efficiently than can the producers' selling agency. The opinion has been recently expressed by one of the leading export houses that so far as that house is concerned, it welcomes the new combinations, feeling that they will help advertise American products, and feeling sure also that the export house will get a considerable portion of the business even of the new combines.

Where, however, the combines are organized on a vast scale involving practically all the producers in America, their power in the foreign market may become so great that counter-combinations on the part of other countries are readily invited. In particular, it is probable, as seems already to have been the case in one important instance, that foreign combinations of *buyers* may be formed to meet the American combination of *sellers*. Where this is the case, a very significant change in the character of foreign commerce takes place. There is no longer a free, open market in which hundreds of buyers and sellers daily work out flexible adjustments of prices, but rather the determination of prices becomes a matter of semi-diplomatic negotiations between high contracting parties. If both sides are reasonable, this may work out in much the same way that the free competitive market would work out, but there is a grave danger that in critical periods deadlocks may come, leading to prolonged negotiations during which a cessation or great restriction of production and export take place.

On the other hand, where combinations under the Webb Act exist primarily for the purpose of enabling individual American producers to enter unfamiliar fields which they could not enter if obliged to bear the whole marketing and advertising expenses

alone, real good may come from them, and at all events we may watch the new experiment with interest.

WHERE REGULATED MONOPOLY IS INEVITABLE

Monopoly, subject to regulation, is necessary in some cases. Unregulated competition between two parallel railway lines easily leads to a cut-throat competition which ruins one or the other. Unless railroads are fully utilized—a condition which rarely happens except under such unusual conditions as the war has brought about—additional traffic on a given line increases earnings faster than costs, as we have seen. Under these conditions, each road of the two competing parallel lines has a great incentive to steal business away from its competitor and to cut rates and to give rebates in the process. Similarly, the limitation of space in a city street would make it undesirable that there should be parallel competing street car lines. Competing telephone companies in a given city are an unmitigated nuisance. In these and other cases, there is virtually consensus of opinion that monopoly of some kind under regulation is necessary.

MONOPOLY AND SOCIALISM

But it is to be observed that, where monopoly of this kind is established, even under public regulation, a strong political tendency arises for a further step. The movement becomes strong for *public ownership*, as is instanced in connection with the American railroad, telegraph, telephone and cable systems at the present time.

There is a moral to be drawn from this fact by those who believe in the system of private property and free enterprise. Regulation of business by the government easily leads to the demand for further regulation, and finally for public ownership. If American business generally should organize into large combinations subject to regulation by the Federal Trade Commission, it would make easier the task of the socialist in his advocacy of the "next step." By and large, the assertion may be safely made that those who oppose socialism must accept competition. Competition is after all a better regulator of business than the Federal Trade Commission. In the special cases instanced above of special public utilities, we reluctantly give it as inadequate or undesirable, but for the general field of business, it is the one sure principle that can promise progress, efficiency, reasonable

prices, and continued freedom from governmental regulation with the danger of ultimate government ownership.

Even for the railroads, the writer is convinced that private enterprise is far preferable to government ownership. In a country whose general spirit is that of competition, we may rely upon enough impetus from the general business field to prevent stagnation in railroading under private monopoly subject to government regulation. The danger of stagnation under government ownership is less easily eliminated. Private enterprise has two great advantages in connection with railroading over public ownership, which must be strongly stressed: (1) The check of the balance sheet. A government can afford to run railroads inefficiently because it can make up the deficits through taxation, but private enterprise cannot. (2) A government railroad is much more exposed to unreasonable demands by labor than is a private railroad. But neither of these points, nor other undoubted evils of government ownership, can make a sufficiently popular appeal to give us certainty that government ownership of railroads can be averted. The writer feels reasonably sure of his generalization that the defenders of private property and free enterprise must cling to the competitive principle as well, or else be unable to make adequate resistance to the socialist. Given competition, the present social order, even with its imperfections, is far better than any system which the socialist might propose to substitute for it.

Competition is a term which is not always understood in the same way. To many critics of the existing social order, competition appears as a dreadful nightmare, a bitter struggle for existence in which the weak and helpless are ruthlessly crowded out. They see in it merely the social manifestation of the Darwinian principle of the "survival of the fittest" of "nature red in tooth and claw." In point of fact, competition is not to be understood apart from what has been termed "the level of competition." Competition may take place with clubs, the stronger savage braining the weaker savage and taking his goods from him, but competition may also take place on a higher plane. A prize fight is a competition, but one subject to rules. The fighter must not hit below the belt, he must not use his teeth or his feet in the contest. Within the limits marked out by the rules, he may

exert himself to the utmost. War and diplomacy represent competitions subject to rules. A general may use heavy guns, as heavy as he can command; his men may shoot accurately; they may use the most powerful explosives; but they may not poison wells or fire upon a flag of truce. A diplomat may bargain shrewdly for his country, but he must not treat a solemn treaty as a scrap of paper. It may indeed be said that the greatest sin against civilization is hitting below the belt, and that the great war which we have just fought through to victory has been fought to vindicate that principle; that Germany, who regarded a solemn treaty as a scrap of paper, who poisoned wells and fired on hospitals, is an outcast against which the whole world has allied itself.

Similarly, in business competition, there is a social, moral and legal level of competition, enforced by trade practices, by public sentiment, and where need be by the law. Handicaps put equally on all competitors constitute a burden to none. If all are prohibited from employing unfair practices, none are handicapped. Unregulated competition may easily lead to sad conditions. Thus in the laundries of New York City some years since, women were working long hours in wet cellars filled with steam. Pneumonia and tuberculosis were frequently found among them. Humane men, employers of these women, asked to better the conditions, correctly replied that they were helpless; that if they incurred the expense necessary to improve the conditions, they would have to raise their prices, and that they could not raise their prices without losing their customers. A solution was found in a new arrangement whereby all were required to improve the conditions and pass on the costs of the improvement to the public. Numerous applications of the principle can be found. The contention that competition should be the regulator does not mean that there is no function for the state or for public opinion or for morality. The level of competition itself must be subject to constant study and correction. But the function of the state in these matters should be largely that of an umpire setting the rules, seeing that they are adhered to, determining the level, but leaving the active business man free to make his own plans and contracts without regulation within the sphere of what is considered legitimate business. As the state goes further than this, it hampers initiative and enterprise, and it paves the way for socialism.

The Sherman Anti-trust Law and Readjustment

By RUSH C. BUTLER

Chairman Federal Trade Committee of the Chamber of Commerce of the
United States of America

IN this discussion I hope to make it clear that Congress would be justified at this time in conferring upon a federal administrative agency the power to determine in advance whether any given agreement or combination violates the rule of the Sherman Law. Thus baldly stated the proposal may seem revolutionary. But it is not. It indicates nothing more than the next essential step in the evolution of federal legislation concerning the regulation of competition. Such proposed legislation and control will bring us only half way to the goal of ultimate desire long since attained in England where the rule of law is the same as in the United States, where no regulation is established to administer the law, where violations of the law do not constitute crimes, and where infrequent resort to the courts either by aggrieved persons or by the government conclusively proves that in practical application the law is in furtherance of and not in opposition to the public interest.

What is the rule of the Sherman Law? In effect only this as presently interpreted,—that agreements unreasonably restraining trade are unlawful. English-speaking people can take no exception to a rule of conduct so sound and so traditional. But in the United States the rule has been enacted in a federal statute which provides that violations thereof shall be deemed criminal offenses punishable by fine and imprisonment. No means are anywhere provided for finally determining, until years after any contract has been entered into, whether or not it violates the law.

The courts alone can decide the question. If some years after an agreement has been made the courts hold that it did unreasonably restrain trade, the crime has long since been irretrievably committed. A man knows definitely and certainly in advance that if he does certain things he commits murder and that he thereby becomes liable to the penalties prescribed by the criminal statute. Hence such a statute deters the commission of the

crime of murder and is a wholesome statute. The facts constituting unreasonable restraints of trade have not been and cannot be catalogued. The facts in one case might clearly constitute unreasonable restraint of trade and the same facts in another case might constitute only a reasonable restraint or even no restraint at all. The result of such a state of complicated uncertainty is not only to keep men from violating the law, i.e., from entering into agreements unreasonably restraining trade, but to keep men from entering into any agreements restraining trade even though the restraints be reasonable and therefore lawful. Lawful agreements are commendable. If fear of the law keeps men from entering into lawful contracts the public interest is violated. The Sherman Law is the basis of such fear to a degree that cannot be overstated. It is, therefore, something more than a law—it is a power beyond the law.

It is advisable, if not necessary, to find a way to avoid this extra-legal violation of the public interest. I believe the way is clearly indicated. The legislative policy of Congress of the past few years indicates it; the attitude of our courts and commissions also points the way. The public is sympathetically awaiting remedial legislation. The department of the government charged with the duty of enforcing the law has accepted, by acquiescence at least if not otherwise, the judgment of parties to contracts restraining trade to the effect that their particular contracts were not unreasonable restraints, and it has accordingly instituted no legal proceedings based thereon. Then too we are just emerging from the new experiences forced upon us by the war. We have new viewpoints. We have learned that prices can be fixed, production limited, territory divided, and many other things tending to restrain trade can be done without loss of profit to the manufacturer or merchant, without injury to purchaser or consumer, and without causing either private or public injury.

A brief review of our federal legislative history having to do with the Sherman Law, of the contemporaneous conduct of persons or corporations subject thereto, and of the attitude of the federal authorities charged with the enforcement thereof, will tend to establish the point stated in the opening sentence of this discussion.

THE SHERMAN LAW AND CONTEMPORARY HISTORY

The Sherman Law was enacted in 1890.¹ Its prohibitions are contained in the first three sections. In order to avoid confusion of ideas it should first be stated that up to the year 1911 the law was interpreted by the Supreme Court as making unlawful every contract restraining trade, but that in *Standard Oil Company vs. United States*, 221 U. S. 1, decided May 15, 1911, the court held the law to make unlawful only those contracts resulting in *unreasonable* restraints of trade.

The first case decided by the Supreme Court directly involving the Sherman Law was *United States vs. E. C. Knight Co.*, 156 U. S. 1, decided January 21, 1895, in which the court held that under the facts in the case interstate commerce was not involved.

The second case decided by the Supreme Court was *United States vs. Trans-Missouri Freight Association*, 166 U. S. 290, decided March 22, 1897. In its opinion in this case the court by a divided vote of five to four held: (1) That the act applied to and covered common carriers by railroad, and (2) that the agreement complained of by the government violated the provisions of the act.

¹ For handy reference the Sherman Law is herewith reprinted:

SHERMAN LAW; OR, FEDERAL ANTI-TRUST LAW
(Act of July 2, 1890; 26 Stat. 209)

An Act to protect trade and commerce against unlawful restraints and monopolies.

Section 1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. Every contract combination in the form of a trust or otherwise, or conspiracy, in the restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal. Every person who shall make any such contract or engage in any such combination or conspiracy, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

Sec. 2. Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor, and on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

Sec. 3. Every contract, combination in form of trust or otherwise, or conspiracy, in restraint of trade or commerce in any Territory of the United States or of the District of Columbia, or in restraint of trade or commerce

The agreement referred to was entered into by a number of railway companies operating in western territory. The preamble to the agreement recited that it was entered into "for the purpose of mutual protection by establishing and maintaining reasonable rates, rules and regulations on all freight traffic both through and local." The carriers contended that the statute in declaring illegal *every* agreement in restraint of trade, meant only such agreements as are in *unreasonable restraint of trade*. Answering the contention, the court said:

The term is not of such limited signification. . . . When, therefore, the body of an act pronounces as illegal every contract or combination in restraint of trade or commerce among the several states, etc., the plain and ordinary meaning of such language is not limited to that kind of contract alone which is in unreasonable restraint of trade, but all contracts are included in such language and no exception or limitation can be added without placing in the act that which is omitted by Congress.

Every agreement in restraint of trade, whether the restraint was partial or complete, reasonable or unreasonable, was therefore held unlawful.

In *United States vs. Joint Traffic Association*, 171 U. S. 505, decided October 24, 1898, the Supreme Court sustained its ruling

between any such Territory and another, or between any such Territory or Territories and any State or States or the District of Columbia, or with foreign nations, or between the District of Columbia and any State or States or foreign nations, is hereby declared illegal. Every person who shall make any such contract or engage in any such combination or conspiracy, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by a fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

Sec. 4. That several circuit courts of the United States are hereby invested with jurisdiction to prevent and restrain violations of this act; and it shall be the duty of the several district attorneys of the United States, in their respective districts, under the direction of the Attorney General, to institute proceedings in equity to prevent and restrain such violations. Such proceedings may be by way of petition setting forth the case and praying that such violation shall be enjoined or otherwise prohibited. When the parties complained of shall have been duly notified of such petition the court shall proceed, as soon as may be, to the hearing and determination of the case; and pending such petition and before final decree, the court may at any time make such temporary restraining order or prohibition as shall be deemed just in the premises.

Sec. 5. Whenever it shall appear to the court before which any proceeding under section four of this act may be pending, that the ends of justice require

in the *Trans-Missouri* case and held that thirty-one railroad companies, engaged in transportation between Chicago and the Atlantic Coast, which had formed an association and agreed that it should have jurisdiction over their competitive traffic and should fix rates, fares and charges, thereby violated the law.

With these two decisions of the Supreme Court squarely denying the right of interstate common carriers to establish rates and practices by agreement, it is a noteworthy fact that the carriers discontinued the practice only for a brief period if at all. They found that it was practically impossible for them to conduct their business without agreements as to rates and practices. Certainly as early as 1906 the practice of making rates by agreement was again resumed and was continued up to the time the government took control of the railroads in December, 1917. The practice was at no time between 1898 and 1917, so far as I know, challenged either directly or indirectly by the government, except incidentally in one proceeding.

The reason why the Department of Justice failed to proceed against the carriers for rate-making by agreement after the decisions in the *Trans-Missouri* case and the *Joint Traffic* case, and

that other parties should be brought before the court, the court may cause them to be summoned, whether they reside in the district in which the court is held or not; and subpoenas to that end may be served in any district by the marshal thereof.

Sec. 6. Any property owned under any contract or by any combination, or pursuant to any conspiracy (and being the subject thereof) mentioned in section one of this act, and being in the course of transportation from one State to another, or to a foreign country, shall be forfeited to the United States, and may be seized and condemned by like proceedings as those provided by law for the forfeiture, seizure, and condemnation of property imported into the United States contrary to law.

Sec. 7. Any person who shall be injured in his business or property by any other person or corporation by reason of anything forbidden or declared to be unlawful by this act, may sue therefor in any circuit court of the United States in the district in which the defendant resides or is found, without respect to the amount in controversy, and shall recover threefold the damages by him sustained, and the costs of suit, including a reasonable attorney's fee.

Sec. 8. That the word "person," or "persons" wherever used in this act shall be deemed to include corporations and associations existing under or authorized by the laws of either the United States, the laws of any of the Territories, the laws of any State, or the laws of any foreign country.

prior to the Standard Oil case, is unknown, but it would probably not be far from the fact to say that such failure was due to the recognition by the Department of the necessity of such method of rate-making by the carriers, and to the Department's belief that the public interest was best served by failing to prosecute.

Modification of the Law by Acts of Congress

1. The Panama Canal Act, approved March 4, 1913, contained a provision prohibiting a railroad company from having any interest in a competitive water line, but further provided that the Interstate Commerce Commission was empowered to permit the continuation of any such ownership if it found that the water line was being operated in the public interest, was of advantage to the convenience and commerce of the people, and that the continuance of such ownership would not exclude, prevent or reduce competition on the water route. It is doubtful whether Congress had ever before recognized the principle that competition may be entrusted to regulation by an administrative body.

2. The Federal Trade Commission Act of September 26, 1914, declared that unfair methods of competition in commerce were unlawful, established the Federal Trade Commission, and conferred upon it the power to administer the law. There appears in this broad grant of power full and complete recognition by Congress of the principle that competition should not as a matter of right be free, but that it should be restricted and subjected to regulation. The commission was authorized to file a complaint against any person, firm or corporation deemed by it to be using any unfair method of competition if it appeared to the commission that the filing of such a complaint would be in the interest of the public. The commission was not required to deal with unfair methods merely trivial in character or affecting only individual or selfish interests. Its functions were to be exercised only in the regulation of such competition as affected the public. The principle thus recognized by Congress is in effect the same as that recognized by the Supreme Court in the Standard Oil case wherein it was held that contracts that did not unreasonably restrain trade, that is contracts not harmful to the public, were lawful.

While considering the Federal Trade Commission Law it may

be appropriate to observe that the act places no limit upon the power of the Federal Trade Commission to determine as a matter of fact what is and what is not an unfair method of competition. The standard established by the Federal Trade Commission Act is no broader, however, than the standards established in Sections 1 and 3 of the Act to Regulate Commerce, declaring that all rates must be reasonable and not unduly prejudicial. The broader the standard, the less the difficulty of administration. In these two laws as well as in many others Congress has recognized the difficulty of limitation and definition. No catalog of specific acts could possibly be made which would clearly define either an unfair method of competition, a just and reasonable rate, or an unjust discrimination.

3. The Clayton Law, approved October 15, 1914, is defined in Section 1 thereof to be an anti-trust law. It establishes standards in that it declares to be unlawful:

- (a) Price discrimination;
- (b) Tying contracts; that is, sales agreements made with the understanding that the purchaser shall not use the goods, wares or merchandise of a competitor;
- (c) Stock ownership of one corporation in another;
- (d) Interlocking of directors.

Again in the Clayton Law the public interest is emphasized, for its prohibitions apply only in cases where the things forbidden would restrain commerce or tend to create a monopoly.

Authority to enforce compliance with the provisions of this law is vested in the Interstate Commerce Commission where applicable to common carriers; in the Federal Reserve Board where applicable to banks; and in the Federal Trade Commission where applicable to all other branches of commerce.

In addition to establishing these standards, the Clayton Law amends the Sherman Law in that it declares (Section 6):

That the labor of a human being is not a commodity or article of commerce. Nothing contained in the anti-trust laws shall be construed to forbid the existence and operation of labor, agricultural, or horticultural organizations, instituted for the purposes of mutual help, and not having capital stock or conducted for a profit, or to forbid or restrain individual members of such organizations from lawfully carrying out the legitimate objects thereof; nor shall such organizations, or the members thereof, be held or construed to be illegal combinations or conspiracies in restraint of trade, under the anti-trust laws.

4. The Sundry Civil Appropriations Act, effective July 1, 1916, making appropriations for governmental expenses, contains the following provision with reference to appropriations for the Department of Justice in the enforcement of the anti-trust laws:

Provided, however, that no part of this money shall be spent in the prosecution of any organization or individual for entering into any combination or agreement having in view the increasing of wages, shortening of hours or bettering the conditions of labor, or for any act done in furtherance thereof, not in itself unlawful: provided further, that no part of this appropriation shall be expended for the prosecution of producers of farm products and associations of farmers who coöperate and organize in an effort to and for the purpose to obtain and maintain a fair and reasonable price for their products.

It is understood that the same provision has been carried in each subsequent sundry civil bill making the same appropriation carried in all appropriation bills. The apparent purpose of this legislation is to grant still further exemption of labor from the provisions penal and otherwise of the Sherman Law. Congress would no doubt justify this exemption on the ground that it was in the public interest. This provision also goes so far as to *recognize the validity of agreements made by farmers for the purpose of obtaining and maintaining fair and reasonable prices for their products*. Here Congress recognizes that it is in the public interest that producers be permitted to obtain *fair and reasonable prices* for the things produced,—or to state it conversely, that it is against the public interest for a person to sell his products at less than fair and reasonable prices. It is to be noted, however, that coöperation among farmers directed toward obtaining and maintaining prices that are higher than fair and reasonable prices is not exempted from the provisions of the Sherman Law.

5. By amendment to the Federal Reserve Act, September 7, 1916, national banks were given authority, subject to regulation by the Federal Reserve Board, to coöperate with each other in conducting banking business in foreign countries.

6. Effective the same date, the Shipping Board Act authorized American steamship lines to enter into such agreements fixing rates or restricting competition, as are approved by the Shipping Board and found by it not to be in violation of the standard established by the act,—that is, not to operate to the detriment of American commerce.

7. The Webb-Pomerene Act, approved April 10, 1918, exempts from the provisions of the Sherman Law contracts, agreements or combinations among persons or corporations doing business in the United States for the purpose of conducting export business only. This act specifically states that its provisions must not be used "artificially or intentionally" to affect domestic business. It also confers jurisdiction upon the Federal Trade Commission to supervise the conduct of export associations and their members, and applies the rule against unfair methods of competition to the conduct of export associations as related to American competitors in foreign markets. The Webb-Pomerene Law directly repeals the Sherman Law in so far as export business is concerned.

8. The United States in assuming control of the railroads accomplished one main purpose, viz., the unrestricted interchangeable use of the carriers' facilities. Under the law as it existed prior to the time the government assumed control of the railroads it would have been impossible for the responsible officers of transportation companies to permit the use of their terminal facilities by competitors or to allow diversion of traffic from their own to competitive lines. The Honorable Edgar E. Clark of the Interstate Commerce Commission recently recommended to the Senate Committee on Interstate Commerce the revision of limitations upon united and coöperative activities among common carriers with a view to eliminating wasteful and unduly expensive competition in rates and service. No man in public life is in better position than Mr. Clark to judge of the necessity for such legislation.

It may also be observed that the Department of Commerce in its active readjustment program for lines of general industry is likewise urging that competitors coöperate subject to certain regulation by the Department.

9. One of the provisions of the act of March 21, 1918, to provide for the operation of transportation systems while under federal control reads as follows:

In determining any question concerning any such rates, fares, charges, classifications, regulations, or practices or changes therein, the Interstate Commerce Commission shall give due consideration to the fact that the transportation systems are being operated under a unified and coördinated national control and not in competition.

This provision seems to be another clear congressional recognition of the fact that competition may go to undue ends, and that it is not against the public interest for the carriers while united to make a higher charge for a service rendered than they had previously made under the compulsion of competition.

10. The Income Tax Law, approved September 8, 1916, section 801, provides that it shall be unlawful for any person exporting articles from any foreign country into the United States, under circumstances therein set out, to sell such articles at a price substantially less than the market value thereof, if the object is to destroy or injure an industry in the United States, or to prevent its establishment here, or to restrain or monopolize the trade in such articles in this country. Again we have in this law congressional recognition of the fact that prices may be made so low as to violate the public interest.

11. Another recognition of the same principle is found in the Lever Law, approved August 10, 1917, enacted "to provide further for the national security and defense, by encouraging the production, conserving the supply, and controlling the distribution of food products and fuel." The law provides among other things that:

In fixing maximum prices for producers, the Commission (Federal Trade Commission) shall allow the cost of production including the expense of operation, maintenance, depreciation and depletion, and shall add thereto a just and reasonable profit.

In fixing such prices for dealers the Commission shall allow the cost to the dealer and shall add thereto a just and reasonable sum for his profit in the transaction.

12. The Committee on Merchant Marine and Fisheries of the House of Representatives in a public report has expressed broad views on the general subject. The court in the United States *vs.* Hamburg-American S. S. Line, 216, Federal Reporter 971, said:

The main subject matter of the controversy, viz., the controlling of transportation so as to allot proportionate shares of it to the different defendants who are in the combination, has recently been most exhaustively considered by the standing committee on Merchant Marine and Fisheries under resolutions of the House of Representatives in Congress. It is manifest from its report that the committee had before it substantially the same evidence which is contained in the record in this case. There is nothing to add to the elaborate presentation of all sides of the controversy which will be found in that report, and we find it

most persuasive to the conclusion that, in view of the peculiarities of ocean transportation, the method adopted by the defendants—if purged of its obnoxious feature, the "fighting" ship—is a reasonable one, which, so far from restraining trade, really fosters and protects it, by giving it a stability which insures more satisfactory public service for all concerned. Without this method, or something like it, there would be, in the language of the committee, one or other of two results:

The lines would either engage in rate wars which would mean the elimination of the weak and the survival of the strong, or to avoid a costly struggle they would consolidate through common ownership. Either would mean monopoly fully as effective, and it is believed more so, than can exist by virtue of (this) agreement.

It seems, therefore, that this particular combination comes fairly within the exception to a strictly literal construction of the statute, which is indicated in the Standard Oil and Tobacco cases.

This review of the attitude of Congress during the past few years as to the Sherman Law clearly establishes that the view of Congress as to the public interest has materially broadened; that Congress no longer feels that unrestricted competition is warranted as a governmental policy, and that regulation not only of restraints on competition but of restraints on contracts can well be entrusted to administrative bodies.

Modification of the Sherman Law by War-Time Activities

The creation of the price-fixing committee of the War Industries Board was not specifically authorized by statute but the committee was the outgrowth of the necessities of the situation. Neither was there any law authorizing the fixing of prices on many articles or commodities the prices of which were controlled directly or indirectly by the committee. In very large measure the prices fixed by the committee were determined or suggested by the producers or manufacturers. The government also placed many restrictions upon manufacturers and producers as to sizes, styles, amount of material permitted to be used, as well as limitations upon markets. Due to the controls so set up, the regulation of prices, production and markets was carried out in a manner satisfactory not only to the industries concerned but to the public at large.

In addition to such form of regulation, the government required of various industries as a war measure that they spend vast sums of money on existing plants in additions and improvements and

in the construction and equipment of new plants. It was inevitable that at the close of the war, whenever that event might occur, there would be vast sums of money invested in the various industries affording productive capacity which would not thereafter be needed, and which would almost certainly menace the industrial peace of the nation. That there has been no panic since the signing of the armistice is a tribute to the good sense and sane judgment of the business men of the country. How long they will be able to hold the situation in check cannot be known, but it seems certain that sooner or later the government must act in the public interest, at least to the extent of permitting competitors to agree to restrict production.

SUGGESTED REMEDY FOR SHERMAN LAW EVILS

The remedy here suggested for the evils resulting from the Sherman Law is that Congress authorize an administrative body to determine in advance whether or not agreements between competitors in restraint of trade are or are not lawful. Let us see how such regulation would work in a concrete case. For example, take the coal-mining industry. It is a natural resource industry, and as such is a special care of the state, because it exhausts a supply that can never be replaced or restored. The Lever Law, approved August 10, 1917, was enacted "to provide further for the national security and defense by encouraging the production, conserving the supply, and controlling the distribution of food products and fuel." For twenty-five years prior to the war, with only two or three brief periods of prosperity, the coal industry was in a deplorable condition, due almost entirely to the fact that the capacity of the mines was largely in excess of that required to produce the coal that the people of the country consumed. Great as was that capacity, it was insufficient to meet the war-time demands made by the government upon the industry. Under the stimulation of the Lever Law, inspired by patriotic motives of the highest order, and being fully cognizant of the additional burden they would have to carry after the war as a result of increasing their productive capacity, the coal operators of the country responded to the demand of the President and the United States Fuel Administrator, and increased both capacity and output beyond all figures ever before known, only to find

themselves today face to face with an economic crisis that cannot be permanently averted without Congressional action. If agreements among competitors fixing prices, curtailing production, and limiting territory in which they may sell their products may be entered into with impunity, the problems of the coal operators and of those interested in many other lines of industry can, with the assistance of the government, be easily solved.

Assume that by authority of Congress coal operators were permitted to enter into agreements in restraint of trade subject to approval by an administrative agency of the government and to regulation by it. Assume that the administrative agency had found a particular agreement to be only in reasonable restraint of trade and therefore approved it in the public interest. Assume further that the agreed prices yielded the operators only a fair and reasonable profit enabling them to pay the miner fair wages and to sell their coal at a cost that was not unreasonable to consumers thereof. And finally assume that the over-capacity of the mines in the absence of the approved agreement would have resulted in irregular running time, unemployment and consequent labor disturbances, cut-throat competition and financial loss to the industry as a whole and irreparable damage to coal-mining communities.

Under these assumptions it is fair to conclude that the following among other results would be accomplished in the public interest if the agreements were permitted by the regulating body to become effective:

1. There would be conservation of natural coal resources. With a fair margin of profit allowed the operator, the temptation to mine coal as cheaply as possible without regard to conservation methods would be largely overcome. I have been reliably informed that one large operating company, knowing that the price of its output as established by the United States Fuel Administration would yield a fair margin of profit, adopted measures of conservation that increased the percentage of realization of the natural resources in the ground from an average 70 per cent thereof mined under pre-war competitive conditions to 82 per cent thereof produced under governmental regulation.

2. Conservation of health and life of the miners would be promoted by the ability to adopt more careful methods of operation and to install modern and improved machinery.

3. Better preparation of coal by cleaning would be insured. Slate, rock and other impurities would be removed at the mine. This would avoid the use of the carriers' transportation facilities to the extent of the bulk and weight so removed, and would tend to relieve car-shortage and would materially decrease transportation charges.

4. Cleaning the coal would also result in greater cleanliness in firing and would reduce the consumers' expense of operation, maintenance and repairs.

5. Greater attention could also be given to preparation of sizes to suit the demands of consumers whose plants are equipped to handle only certain sizes of coal.

6. The profit to the operator would be in the public interest. It is now conceded to be in the interest of the public that goods and products be sold and handled so as to yield a margin of profit. It is considered to be against the public interest to compel or even to permit competitive prices to become so low as to be less than the cost of manufacturing or producing. This principle has been recognized by the Federal Trade Commission in several complaints it has filed. In complaints filed against the manufacturers of mail chutes the only violation of law alleged by the commission is that an unfair method of competition was used by the manufacturers in that they sold and are selling their product "at and for a price which is less than the cost of producing the same."

7. Curtailment of production would not be so handled as to shut down completely any mine desiring to operate, but would equitably distribute the burden of lack of business among the operators.

8. Regulation of production would also permit the seasonable handling and movement of coal, allowing it to move regularly throughout the year, making provisions for storage, regularity of production, distribution and supply.

9. Labor would be afforded regular, if not daily employment, and at living wages.

10. Coal operators working under such governmental regulation would be in position to coöperate with the common carriers serving their mines. This would result in minimizing, if not eliminating, car-shortage periods and congestion of the tracks and facilities of the carriers.

11. The establishment of zones would keep lower grade coals nearer points of production and permit wider and perhaps unlimited movement of special quality coals, such as cannel, smithing, smokeless and anthracite. This would avoid cross-hauling with all its attendant economic evils.

12. The government is obviously interested these days in the substantial prosperity of all lines of industry. It derives the money with which to discharge its vast financial obligations in part from income and excess profits taxes and in part from the sale of bonds. If the coal industry, for example, does not prosper, the government's revenues realized from income taxes paid by coal companies will be small indeed and its revenues from excess profits taxes will be so small as to be negligible. Unless the industry prospers it will have no money with which to buy bonds.

All of the results above enumerated may reasonably be expected to flow from the regulation suggested and are all in the public interest.

The proposed legislation conferring authority upon an administrative body to approve or disapprove in advance agreements in restraint of trade would be in accord with our well-defined legislative policy. The rule of the Sherman Law is not objectionable. Repeal of the criminal provisions of the Sherman Law would be an obvious remedy for its resulting evils, but such amendment would not be in accord with our legislative policy and is therefore not suggested. The administrative body authorized to approve such agreements would naturally be composed of men well versed in business affairs and the laws applicable thereto. Their views concerning questions of public interest would be broad, and could reasonably be expected to be sympathetic. Their decisions could keep abreast of national policy much more easily than could legislative enactment. The facts constituting violations of the law would be made known in advance to all concerned and the extra-legal restraints upon lawful enterprise would disappear. The Federal Trade Commission in the nature of things is the agency to which the suggested authority should be entrusted. Though its jurisdiction would thereby be enlarged, its functions would not be materially changed. The Commission already possesses ample jurisdiction concerning trade practices. Agreements in restraint of trade, whether they be lawful or unlawful,

are so closely related to trade practices that it would be folly to create a new or a different body to administer the proposed new law.

The condition in which business finds itself at the present time is not substantially different than it was when President Wilson addressed Congress, January 20, 1914, recommending the enactment of the Federal Trade Commission Law. The President then said:

And the business men of the country desire something more than that the menace of legal process in these matters be made explicit and intelligible. They desire the advice, the definite guidance and the information which can be supplied by an administrative body, an interstate trade commission.

The opinion of the country would instantly approve of such a commission. It would not wish to see it empowered to make terms with monopoly or in any sort to assume control of business, as if the Government made itself responsible. It demands such a commission only as an indispensable instrument of information and publicity, as a clearing-house for the facts by which both the public mind and the managers of great business undertakings should be guided, and as an instrumentality for doing justice to business where the processes of the courts or the natural forces of correction outside the courts are inadequate to adjust the remedy to the wrong in a way that will meet all the equities and circumstances of the case.

Congress in response to this recommendation of the President enacted the Federal Trade Commission Law and conferred upon the commission thereby created the broad powers herein above referred to.

The language of the President above quoted is equally applicable to existing conditions. Ours is a government of laws and not of men. If the principles upon which our legislative policy is based are sound, men of integrity, ability and vision can be found to administer these laws. The Federal Trade Commission as an institution is in accordance with current legislative policy. It is the judgment of many men whose opinions are entitled to respect that the Federal Trade Commission should be enlarged to not less than nine members, and that upon such enlarged commission Congress would be justified in conferring these additional powers of regulation.

The Advantage of Preventing Unfair Competition through an Administrative Body

By W. H. S. STEVENS, PH.D.

Washington, D. C.

IN a study of the Federal Trade Commission and Clayton Acts made shortly after their passage,¹ the writer, taking a generally favorable view of the legislation, expressed two opinions. The first was that perhaps "the most important power of the commission and the one most likely to make it an important administrative authority was that over unfair competition." The second was to the effect that there was some administrative advantage in preventing unfair methods of competition through the commission with direct and final appeal to the Circuit Court of Appeals instead of leaving the enforcement to the ordinary mechanism of the Department of Justice and the courts. The conclusions thus expressed are, in the light of subsequent events, far from requiring any modification. On the contrary the scope of the commission's work and the results obtained by this body serve to emphasize their correctness and impress upon one the sound wisdom of the legislation which provided for administrative control of unfair methods of competition.

Of the fact that the legislation was needed there can be little or no doubt.² The volume of applications for complaints which has been received by the commission is alone, in all probability, sufficient evidence of this fact.³ If this is not a satisfactory criterion any survey of the character of the complaints issued will convince unprejudiced persons. While this is perhaps not the place for indicating the nature of the methods against which the commis-

¹ Stevens, the Trade Commission Act, *American Economic Review*, December, 1914, Vol. IV, p. 840, the Clayton Act *ibid.* Mch. 15, Vol. V, p. 38.

² Cf. arguments of the writer over legislation on this subject in Articles on Unfair Competition in *Political Science Quarterly*, June and September, 1914, Vol. XXIX, pp. 282 and 460.

³ Up to November 21, 1918, about four years after its creation, the commission had received 876 applications for complaints, a rate of approximately 225 a year. Cf. W. B. Colver, Chairman, Address before the American Specialty Manufacturers' Association, Cleveland, November 21, 1918.

even centuries at times for this evolution to take place. To have employed the method under discussion for the purpose of preventing unfair methods of competition would have been to run the grave danger of a somewhat narrow and restricted construction of this term which might continue for many years during which the judicial interpretation of the act slowly evolved.

Secondly, under this method of enforcement the matter of construction must necessarily have been left in the hands of a considerable number of courts, either district courts or circuit courts of appeal. Since one court is more conservative or more progressive than another, there is grave probability that no consistent construction of the law would have appeared for some time since each court would arrive at its conclusions independently upon the basis of the facts before it. These facts would vary from district to district and the theories of the parties in the cases involving the same points before different courts would necessarily show the utmost diversity. Because of this situation different courts might arrive at diametrically opposite conclusions in cases involving the same methods and practices. The law as a consequence would in all probability be in a state of considerable confusion for some time in the future.

The third and most important objection to the method of preventing unfair methods of competition through the private right of action lies in the difficulty which the private individual would have in procuring the necessary evidence in a great many cases. The organizations most likely to suffer from unfair practices are the small and weak though often efficient concerns struggling for a market. Many unfair practices involve the most complicated sets of economic facts—costs, profits, margins, stocks on hand, production, sales, prices, etc. The small organization cannot usually command the legal processes necessary to obtain these facts and even if it could, its financial resources are seldom such as to enable it to do so or to secure the legal, economic, accounting and statistical assistance frequently necessary to enable it properly to prepare and present its case before the court. In a good many instances it cannot be doubted that competitors submit to practices which they consider objectionable and unfair simply because they know that it would involve so heavy an expense to contest them without any certainty of their being able to win their cases.

Finally, and by no means the least important consideration against the method of private right of action, is the fact that methods of competition very frequently involve matters of grave public interest which makes desirable affirmative action by the government itself to protect the public interest.

For the reasons enumerated, therefore, it may be greatly doubted that any adequate protection would be afforded to the relatively small organization against the unfair practices of competitors, could injured parties only secure protection against such methods through private right of action⁴. It may therefore be concluded that the results obtainable by the above mentioned method of procedure in unfair method of competition cases would be far from satisfactory.

PREVENTION THROUGH DEPARTMENT OF JUSTICE

A second method of procedure which might conceivably have been attempted for preventing and eliminating unfair methods of competition would have been to turn this whole matter over to the Department of Justice under a method of procedure similar to that employed in handling violations of the Sherman Act. Such an arrangement would undoubtedly possess important advantages as compared with the private right of action in preventing unfair methods of competition.

In the first place the general public interest would be better safeguarded by provision for affirmative governmental action than would be the case were the right of action merely a private matter. Secondly, there would not exist that same lack of adequate protection to small organizations on account of the expense involved in the prosecution of private suits as would obtain where such suits were the sole protection against unfair methods of competition.

⁴ Some indication of the possible lack of effectiveness of the private right of action alone or compared with administrative action may perhaps be obtained by considering the results of the operation of Sections 2 and 3 of the Clayton Act which forbid price discriminations and exclusive and tying arrangements respectively, both of which methods may properly be regarded as unfair methods of competition. The act also gives parties suffering from these methods a private right of action with treble damages for injuries suffered in addition to the authority which the Trade Commission has to prohibit these practices. A very considerable number of complaints have been issued by the commission under these two sections but the proportion of suits which have been brought by individuals are exceedingly few.

Despite these obvious advantages in favor of the method under discussion as compared with the method of enforcement through the individual right of action, many of the same objections as were suggested to the latter course of procedure may also be raised against the former.

The Department of Justice is primarily and in the last analysis a legal organization. It would appear reasonable to expect, therefore, that the construction and interpretation of the term "unfair methods of competition" adopted by such an organization would be very similar to that of the courts. It would also appear not incorrect to assume that the concepts and ideas of this department with reference to this matter would, relatively speaking, enlarge but slowly as the writer has indicated would probably be the case were the construction of this act left entirely in the hands of the courts. Moreover, if as is the case with the Federal Trade Commission Act final decision as to the legality of various practices rested with the Circuit Court of Appeals except upon *certiorari*, there would almost of a certainty exist the same confused state of the law owing to different decisions in different jurisdictions on the same method of competition as would exist were it attempted to prevent unfair competition through the private right of action.

Such a possible conflict in decisions, however, would probably exist to a less extent under enforcement through the department than under prevention by private right of action owing to the fact that one central organization, the Department of Justice, would handle all cases and would presumably be obliged to develop a certain logical theory or theories of this law which would be consistently employed in the preparation and trial of cases in which the department took action. This is an advantage of no little importance in favor of this method as compared with the one previously discussed. At the same time, as already indicated, many of these cases involve numerous economic, accounting and statistical as well as legal principles and facts and even the Department of Justice is not well equipped to handle the first three matters. Moreover, the Department of Justice has no such broad visitorial powers or authority to obtain reports as is possessed by the Federal Trade Commission. These powers enable the latter body before the actual trial of cases to obtain access to correspondence, production, cost, sales, price and other records

both of the party complained of and its competitors and also to require reports covering any material factor not only relating to the business of the party complained of but also the business of its competitors. It is, of course, possible for the department to subpoena witnesses in court, to call for the production of books and papers, etc., etc., but the legal rules in regard to subpoenas are rather strict. A subpoena, in order to be good, must as a rule be reasonably specific; the documents requested must be shown to be relevant and the amount of data required to be produced must be not unreasonable. Subpoenas are not issued for documentary data merely for the purpose of determining whether or not certain evidence is contained therein. In other words, subpoenas issued for the purpose of enabling a "fishing expedition" are not granted by any court.

Without ability to go directly to correspondence files, accounts, records, etc., and to go through them as thoroughly as may be necessary in order to determine the effect of a particular practice or practices, any organization is likely to be greatly handicapped in determining the fairness or unfairness of particular methods. While a certain amount of such work can be done through the use of subpoenas, it is not always possible on account of the technicalities in connection therewith so to draft such subpoenas as to secure the information required. Moreover it frequently requires a broad general grasp of economic principles as well as expert accounting and statistical analysis to determine what facts are to be looked for and where they are to be found and how they should be analyzed,—for in many cases the concerns themselves would be unable to advise either as to what data to obtain or methods of analysis to employ in order to show the effects of certain practices.

All these facts would appear to be against the placing of jurisdiction over unfair competition in the hands of the Department of Justice rather than in those of an administrative body. The fact that the department possesses no force of economic, statistical and accounting experts would seem to argue that there might be a neglect of these economic, statistical and accounting aspects and elements in the determination of unfair methods of competition. The department's lack of broad visitorial powers would inevitably tend to emphasize this possibility for the reason that in the ab-

sence of such powers it is frequently impossible to obtain the requisite, economic, statistical and accounting facts necessary to prove the effect of various practices upon competitors. Moreover, the inability of the department to require statistical accounting and other reports from concerns not parties to complaints would be certain greatly to handicap it in procuring the best evidence in many cases as to the effect of certain methods.

PREVENTION THROUGH AN ADMINISTRATIVE BODY

The third possible course of procedure that was open to Congress for preventing unfair methods of competition was to do exactly what was actually done, i.e., place the authority to enforce the act in the hands of an administrative body. The Federal Trade Commission Act declares unfair methods of competition to be unlawful and lays upon the Federal Trade Commission the duty of preventing the same.

When the commission believes that an organization is utilizing an unfair method of competition and it appears to it that a proceeding in this respect would be in the interests of the public, the commission issues and serves a complaint stating the charges and giving notice of a hearing at least thirty days after service. The party complained against has the right to appear and show cause why an order should not be entered requiring him to desist from the violation of law charged in the complaint. Any party, upon good cause being shown, may be allowed by the commission to intervene and appear.

If, upon hearing, the commission believes the method of competition in question to be prohibited, it makes a report in writing stating its findings as to the facts, and issues an order to the party complained against ordering him to cease the use of the method in question. The commission may modify or set aside its report or order at any time prior to the filing of the transcript of the record of the hearing with the Circuit Court of Appeals.

In order to enforce the order of the commission it is provided that, if it is not obeyed, the commission may apply to the Circuit Court of Appeals of any circuit where the method in question was used, or the party resides or carries on business, filing the transcript of the record of the proceeding, including testimony. The court then takes jurisdiction, notifies the party, and has full

power to enter a decree affirming, modifying, or setting aside the order of the commission. The findings of the commission *as to the facts, however, are conclusive if supported by testimony*. If either party applies to the court for leave to adduce additional evidence and can show that it is material and that there were good reasons why it was not introduced before the commission, then the court may direct that such additional evidence be taken before the commission. This body may then modify its findings or make new ones, and again file the results with the court (which findings are deemed conclusive if supported by testimony), together with the additional evidence with its recommendations, if any, for the modification or setting aside of its original order.

The judgment and decree of the Circuit Court of Appeals is made final, except that the Supreme Court may review upon *certiorari*. The jurisdiction of the Circuit Court of Appeals to enforce, modify, or set aside the orders of the commission is made exclusive and all such proceedings are given precedence over other cases and are required to be expedited in every way. The order of the commission or the judgment of the court to enforce the same cannot absolve anyone from liability under the anti-trust acts. Any party against whom an order of the commission is made may obtain a review upon an application to the Circuit Court of Appeals to set aside the order.⁴

The advantages of this method of procedure follow logically from the preceding discussion of the disadvantages of preventing unfair competition through the courts, and the Department of Justice and the courts. The first advantage is in the matter of the construction of the act.

ADMINISTRATIVE CONSTRUCTION OF THE ACT

As an administrative body the composition of the commission is likely always to be of such a character as to number among its five members men formerly engaged in different professions, businesses and occupations. There would, therefore, seem to be no particular reason why the commission should be bound by legalistic traditions which might possibly limit the construction of unfair methods of competition in such a way as to confine it to either the old common law interpretation or make it synonymous with

⁴ Federal Trade Commission Act, Sec. 5.

the Sherman Act or both. The interpretation of the statute should undoubtedly be broad enough to cover not only these practices but many more as well.⁶ The old common law rule, as already indicated, was relatively narrow in its application and methods of unfair competition though frequently enjoined in Sherman Act cases could probably never have been so prohibited unless such acts were in connection with a conspiracy, combination or agreement in restraint of trade or were sufficient to amount to an attempt to monopolize, even though competitors might be adversely affected by such methods. As stated, however, the construction of this act can and should extend over a much broader field than that which would be covered by the interpretations mentioned.⁷

Competition is in essence an economic matter in that it is a phenomenon of the economic world. From this standpoint, therefore, there must and should be economic as well as legal criteria for the determination of what constitutes fair and unfair competition. The commission has extraordinarily wide powers of investigation on its own initiative, the authority to examine books, papers and records of corporations and to make copies thereof and to require either annual or special reports of corporations engaged in interstate commerce. In pursuance of its powers it is authorized to make investigations of industry and to report thereon, and in such connection it has upon its staff in addition to its attorneys a large force of highly trained economists, accountants, and statisticians all of whom are available as circumstances may require for the analysis and study of unfair competition and who can at any time be employed for the purpose of conducting investigations into the economic effects of certain practices.

As a result of all these facts the commission should be in better position to lay down and develop sound standards for the operation of the competitive principle and to develop the lines along which the competitive process should be conducted than either the courts, or the Department of Justice and the courts together. It is noteworthy that the conduct of the work of the commission clearly indicates that that body recognizes the importance of the

⁶ Cf. Stevens W. H. S., "Unfair Competition," Chicago, University Press, 1917.

⁷ Cf. also Stevens "Unfair Competition."

economic element in unfair competition. This appears not only in the organization of the commission's staff but also in some of the proceedings begun by it. In the commission's method of handling complaints, all such complaints after investigation go together with the evidence and the reports of the investigators thereon to a board of review. The function of this board is to review this evidence and these reports and make its own report and recommendations thereon to the commission which passes finally upon the cases. Throughout the entire history of the commission the composition of this board has included both economists and lawyers, the chairman in each case being a lawyer.

The so-called Old Dutch Cleanser and Sears Roebuck cases may be used as illustrations of cases in which the commission has apparently recognized the economic element in unfair methods of competition. In the Old Dutch Cleanser case the complaint was directed against the Cudahy Packing Company alleging as an unfair method of competition that the said company maintained resale prices on this product. The commission found:

(16) That the effect of the price fixing aforesaid has been and is: (a) To secure for respondent, The Cudahy Packing Company, on its "Old Dutch Cleanser," the trade of jobbers and other wholesalers, and especially the relatively higher cost and more inefficient jobbers and other wholesalers, constituting the bulk of the jobbing and wholesale trade, and to enlist their active support and coöperation in enlarging the sale of its price-maintained cleanser, to the prejudice of competing manufacturers who do not fix, require, or enforce the maintenance of resale prices upon their cleansers, thereby protecting such jobbers and other wholesalers against the price competition of other jobbers and wholesalers and especially the relatively lower cost and more efficient establishments;

(b) To tend to force manufacturers who do not fix, require or enforce the maintenance of resale prices and who compete with respondents in the sale of powdered cleansers, also to inaugurate and enforce a system of maintenance of resale prices upon their powdered cleansers, in order to offset the preference of jobbers and other wholesalers for respondent's price-maintained cleanser and to enable manufacturers who do not maintain resale prices upon powdered cleansers to compete upon more equal terms with respondent;

(c) To eliminate competition in prices among jobbers and wholesalers handling "Old Dutch Cleanser," thereby interfering with many such jobbers and other wholesalers, and especially the relatively lower cost and more efficient establishments in their sales of such cleanser at such prices as they may deem adequate and as are warranted by their costs, selling efficiency, and existing trade conditions;

(d) To compel the public, or such portion thereof as require or prefer "Old

Dutch Cleanser" to pay prices therefor based on a gross-profit margin fixed, as aforesaid, according to the costs of the relatively higher cost and less efficient establishments, constituting the bulk of the jobbing and wholesale trade, instead of a price based upon the competition of jobbers and other wholesalers with widely varying stock turns, costs, and efficiency.¹

In the Sears Roebuck case the commission charged the Sears Roebuck Company with false and misleading advertising and with the sale of sugar below cost when such orders for sugar were combined with orders for other goods. The following quotations from the commission's brief in the Circuit Court of Appeals are worthy of note in this connection:

Petitioner has intended to take, and has taken, custom from many of its thousands of retail competitors, solely upon the basis of admitted misrepresentations of its goods, which, as already set forth, were distinctly intended and designed to procure business on the basis of such misrepresentations instead of upon the basis of quality, service and price. The result was inevitably to deprive petitioner's retail competitors of business and to weaken and render less effectual the efficiency of such retail competition from whence it follows that . . . these methods must be regarded as unfair methods of competition . . .

It is submitted to the Court that this combination offer is as frankly violative of the law of fair competition — i.e., a competition in productive and selling efficiency—as are the misrepresentations made by petitioner. In the face of methods of this character, it is impossible for competition to operate freely, bringing about that adjustment in relative strength and position of competing organizations, with consequent benefits to consumers in the form of quality, service and price, which it was the intention and will of society to provide in adopting as the basic theory of business organization, the principle of competition.²

It is believed not to be an exaggeration to say that the commission, giving careful consideration to the economic as well as legal aspects of unfair competition and possessed both of extraordinarily broad investigatory powers, and a highly trained staff of lawyers, economists, accountants and statisticians, will in the long run evolve sounder and more adequate criterions for the determination of what constitutes unfair competition than could possibly be developed through any other agency than an administrative body. It is, of course, true that the courts may refuse to follow the commission's construction and interpretation as well as they

¹ *Annual Report of the Federal Trade Commission*, 1918, p. 130.

² *Sears Roebuck & Co. vs. Federal Trade Commission*, Brief and Argument for Respondent, United States Circuit Court of Appeals for the Seventh Circuit, pp. 99, 101.

might refuse to follow that of the Department of Justice. It may be conceded, however, that there would be no loss in this respect from the employment of commission method as compared with the Department of Justice method. Moreover, as the findings of fact of the commission are conclusive if supported by testimony, and the commission is vested with the power to make orders on the basis of these facts, it is certainly to be presumed that the theories of the commission as to construction and interpretation will be treated with more consideration than would be accorded to the theories of the Department of Justice.

EASY AND EXPEDITIOUS PROCEDURE

Another advantage of the commission's method of enforcement relates to the adequacy of the protection afforded business concerns through this method of procedure. It is, of course, true that the method of procedure through the Department of Justice would eliminate that lack of protection on account of the expense factor which is one of the principal objections to the method of preventing unfair methods through private right of action. And it is also true that the Department of Justice method would protect the general public interest in this matter in a fashion impossible under the private right of action. All these advantages of the Department of Justice method, however, are equally obtainable under the commission method. Any concern that is dissatisfied with the method of competition employed by its competitors may file a complaint with the commission which will investigate the same and, if the facts warrant, will proceed against the manufacturer or other concern using the unfair method in question.

Thus an easy, expeditious and inexpensive (from the standpoint of business organizations) method is provided for the correction of injuries suffered by concerns through such method and the complaint of the small concern will receive as much attention as the complaint of the large. Nor will the former's case fail for lack of funds to employ legal and other expert advice which may be necessary to prove the case, as might well be true were the sole remedy a private right of action in court to secure protection against the methods of competitors. Yet another important advantage of preventing unfair competition through an administrative body like the commission relates to the flexibility of administrative as compared with legal procedure. Where cases are handled by the

Department of Justice and the courts, a long time must frequently elapse before the decision of the matter. Legal procedure is relatively both slow and technical as compared with the action of an administrative body. Moreover, it is possible for an administrative body to call in an entire industry if necessary as was done by the Federal Trade Commission in certain of the commercial bribery cases. Under rules of legal procedure it would probably be impossible in many cases for the Department of Justice to do this. Instead it would probably be necessary to file and try a complete series of separate suits one against each offending party.

ORDERS OF THE COMMISSION AND JUDICIAL REVIEW

There is yet another matter in connection with the administrative enforcement of the act that requires careful consideration. This is the question of how far and to what extent the orders of the commission will become subject to judicial review. This is important from several standpoints but especially so from that of the construction and interpretation of the act. If the orders of the commission are not contested or the commission is not forced to take them before the courts in order to secure their enforcement it follows that the constructions and interpretations of the commission will necessarily constitute the criterions for the determination of unfairness in the great majority of cases. These criterions will thus tend to become the ones recognized by business and the public as determining the fairness or unfairness of particular methods, and gradually they will become firmly established. It has been indicated that the commission, on account of factors previously discussed, is better equipped probably to develop a sound construction and interpretation of the term unfair methods of competition than any other governmental agency except an administrative body of the same character. During the four years since the organization of the commission there have been several indications that the commission's orders are not likely to be frequently contested. In many cases the parties engaged in certain methods of competition such as commercial bribery are only too glad to be rid of such practices and welcome a valid excuse for refusing to continue a system which they or at least the bulk of them dislike and abhor but continue to practice because practically forced to do so by the competition of other

concerns. Secondly many practices complained of, such as passing off and misrepresentation, etc., are not only obviously unfair and uneconomic but are tinged to such an extent with the element of moral turpitude that few concerns have the hardihood to subject them to judicial review. In such cases offending parties are only too glad to take a finding and order without contest, and correct their practices.

The best evidence of the fact that judicial review is unlikely to be called for in more than a small proportion of cases under the administrative method of procedure lies in the record of the cases before the commission. Up to November 21, 1918, 876 applications for complaints had been received by the commission. Of these approximately one-half, 444 to be exact, were dismissed without public notice or knowledge while 213 more were under investigation. In the case of the balance of the applications, 219 in number, complaints were issued. Of this group 124 were disposed of, ten by dismissal, the respondents having made a sufficient defense, and 114 by orders to cease and desist. In 109 out of these 114 cases the orders were issued by and with the consent of the respondent and in the other five cases the action was tried and argued and resulted in the order.¹⁰ In only two cases to date have respondents appealed to the Circuit Court of Appeals against the order of the commission.

These facts lead to two conclusions: First, that certain methods complained against by the commission and against which orders are issued will never be defended by the parties employing them, and the orders of the commission in connection therewith will not become subject to judicial review, and second, that certain methods complained of by the commission will not be defended and no attempt will be made to defend them against the commission's order until orders against such practices have been so often issued and over such a long period of time that the method in question has come to be generally recognized as an unfair method of competition together with the reasons for so regarding it. In these ways and for the reasons mentioned it is believed that the construction of unfair methods of competition by the commission will tend to gradually establish itself in the law of

¹⁰ W. B. Colver, Chairman, Address before the Commission Specialty Manufacturers' Association, Cleveland, November 21, 1918.

Department of Justice and the courts, a long time must frequently elapse before the decision of the matter. Legal procedure is relatively both slow and technical as compared with the action of an administrative body. Moreover, it is possible for an administrative body to call in an entire industry if necessary as was done by the Federal Trade Commission in certain of the commercial bribery cases. Under rules of legal procedure it would probably be impossible in many cases for the Department of Justice to do this. Instead it would probably be necessary to file and try a complete series of separate suits one against each offending party.

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the country and that this construction will be more adequate to preserve fair competition than would a construction evolved by any other than an administrative body of a similar character. Probably it is true that the commission would welcome judicial contests of its orders especially in border line cases where it is extremely difficult to determine the question of fairness or unfairness. The affirmative decision of the courts on the commissions orders would immediately set at rest the law on the contested methods, and adverse decisions would enable the commission to ask Congress for legislation to cover the methods thus upheld.

In conclusion, the belief may be expressed that the unprejudiced student of the commission's work will conclude that the commission has done remarkably well and that in a relatively short space of time it has accomplished a great deal in the way of freeing trade and competition from the throttling influence and effects of the numerous uneconomic and vicious practices embraced in unfair methods of competition.

Summary of the Work of the British Engineering Standards Association¹

By C. LEMAISTRE

Secretary, British Engineering Standards Association

THE insistent demand created by the war for the maximum output of manufactured material in the minimum of time has naturally brought to the fore those means by which economy in production can be effected, and in this way standardization in the engineering world has become almost a word to conjure with, but like all good things, it must be taken in moderation, and the standards recommended must, by a process of periodic revision, be kept abreast of invention and progress; otherwise there is the danger of standardization becoming crystallization. It may fairly be said that the primary objects of standardization are to secure interchangeability of parts, to cheapen manufacture by eliminating the waste of time and material entailed in producing a multiplicity of designs for one and the same purpose, and also to expedite delivery and so reduce maintenance charges and stores.

ORGANIZATION AND PRINCIPLES

Seventeen years ago, however, neither the necessity nor the value of work of this character and still less its intimate relation to economy and speed of production were at all generally recognized, and it was to remedy the chaotic state of things then existing in the engineering industry of Great Britain that the late Sir John Wolfe Barry, K.C.B., F.R.S., in 1901 took the initial steps, when he brought the subject to the notice of the Council of the Institution of Civil Engineers, which resulted in the formation of the British Engineering Standards Committee.

From its inception, certain definite principles have governed the work of the committee, amongst which may be placed in the forefront the community of interest of producer and consumer, which is, in fact, the corner stone of the organization. It was also realized that the committee should not be an academical

¹ Reprinted from paper read before the Annual Meeting of The American Society of Mechanical Engineers, 29 West 39th Street, New York, December 3 to 6, 1918.

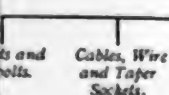
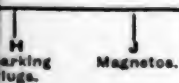
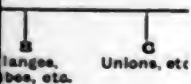
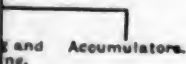
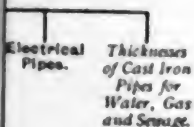
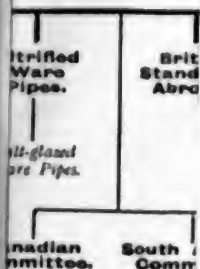
body, but an industrial organization in the closest touch with practical requirements and modern scientific knowledge and discovery; that it should only undertake standardization to meet recognized wants, and then only at the request of the principal interests concerned; that it should confine itself to setting up standards, leaving it to the user to satisfy himself by inspection and supervision that the standards were being adhered to; and, most important of all, that periodic revision of the standards should be undertaken so that improvements might be incorporated, the various industries thus being prevented from becoming stereotyped and their methods hidebound.

From the small nucleus of seven members who formed the original committee, a far-reaching organization has developed with some 160 committees, sub-committees and panels, including in all over 900 members and dealing under one central authority with standards relating to practically the whole field of engineering. Thus for many years past, the British Engineering Standards Association, as it is now called, has provided the neutral ground upon which the producer and the consumer, including the technical officers of the large spending departments of the government and the great classification societies, have met and considered this subject of such vital interest to the well-being of the engineering industry of the country. To the observance of the democratic and progressive principles outlined, coupled with the devoted labor of its members freely giving their time and experience to the work, often at great personal expense and inconvenience, may be attributed the increasing success of this work of growing national importance.

A large number of British standard specifications and reports have already been issued and these are constantly being added to, the most recent addition being the specifications for aircraft material and parts drawn up at the request of the Department of Aircraft Production of the Ministry of Munitions, for whom the association acts practically as the Departmental Specifications Committee.

TYPES OF STANDARDIZATION TAKEN UP BY THE COMMITTEE

The standardization of steel sectional material was the first work taken up by the committee. The British standards for this



STANDARDS ASSO



material, so important in the construction of ships, bridges and underframes for railway wagons, have had a very wide adoption. The total number of sections is some 175, and the recently formed Mercantile Section of the Admiralty, as a war measure, was able to select from this list a largely reduced number and so put into operation an exceedingly economical measure with but little delay. The testing requirements of Lloyd's Register and the other great classification societies and the Board of Trade have been unified through the work of the committee.

It would appear from the steelmakers' returns for 1913, giving the tonnage of lengths rolled of each section, that 95.7 per cent had been produced by standard rolls and only 4.3 per cent by non-standard rolls, the work thus having proved of immense utility to the steelmakers. In the case of tramway rails, standardization has had the result of reducing to a minimum the sections required; at the present time there are only five standard sections as against over seventy sections prior to the advent of the committee. These sections are now being reduced to three, one being a special section for interurban tramways operating at a higher speed than those of the towns. As a further instance of the benefit of the committee's labors may be mentioned the standard specification for Portland cement, which is practically universally adopted throughout the country.

In regard to the electrical industry, the most important piece of work has been the issue of standardization rules for electrical machinery, in the drafting of which much benefit has accrued through the close and very cordial coöperation of the Standards Committee of the American Institute of Electrical Engineers. A large amount of standardization has been effected also for the automobile industry, especially in regard to the special steels used.

From time to time government departments have called upon the Standards Committee to carry out work for them, as, for instance, in the case of the Ministry of Munitions in relation to the question of screw-thread tolerances and the gauging of screws generally. Then the Indian Government requested the committee to undertake the question of standard designs for locomotives, and these have proved of immense value. The Road Board also asked the committee to draft specifications for road material. As already mentioned, at the request of the Department of Aircraft

Production, the association is dealing with the specifications for aircraft materials and parts as a war measure for the department. To carry on this important work a large number of sub-committees have been formed, consisting of officers from the technical, supply and inspection departments, together with representatives from the various trade organizations concerned; the specifications in this case are not published by the association in the ordinary way, but are issued to the Department of Aircraft Production, by whom they are sent to the various manufacturers of aircraft material on the government list, in this way becoming obligatory.

In regard to the question of finance, the funds for carrying out the work of the committee have been provided by the government and the industries concerned. In 1903 the government included in the estimates a substantial contribution, which was subsequently extended for the years 1904-5-6 by a grant-in-aid equal to the amount contributed by the supporting institutions, manufacturers and others. This was continued on a smaller scale down to 1916, and a further grant on the same condition is being continued to March, 1919. The Indian Government has been a generous supporter of the committee, and the governments of other overseas dominions have also given financial assistance. A liberal response to the committee's appeal for funds has been made by the engineering industry of the country and also by railway, shipping and the other companies, and by some of the local government boards and the tramway and electricity authorities. The expenses of the whole organization up to the war were under £4000 a year, but, owing to the widening of the field of its labors, this amount has been very greatly exceeded.

The committee, as many are aware, has recently become incorporated as an association, under license of the Board of Trade, in order to enable it in the first place to continue the work carried out by the Engineering Standards Committee, viz., to coördinate the efforts of producers and users for the improvement and standardization of engineering materials, and, secondly, in order to secure undisputed legal right to its mark or brand to be attached by manufacturers to their products as a hall-mark of goods made in accordance with the British standard specifications.

The chairman of the association is Sir Archibald Denny, Bart., who succeeded the late Sir John Wolfe Barry, to whose guiding

hand during the many years of his chairmanship, so much of the success of the movement is due. The Main Committee, as the governing committee is called, consists of members nominated by the leading technical institutions, viz., the Institutions of Civil Engineers, Mechanical Engineers, the Iron and Steel Institute, the Naval Architects, and the Institution of Electrical Engineers; there are also two representatives of the Federation of British Industries; and there are three members, not representative of any institution or association, but elected for their eminence in the profession.

The members of the Federation of British Industries give the various trade organizations connected with the work of standardization a direct channel through which to place their views before the main or executive committee of the association.

Rotation of office is provided in that the chairman and vice-chairman and one-third of the group of members retire annually, being eligible for reëlection. The Main Committee is the sole executive authority and all specifications and reports are presented to it for final adoption. The procedure before embarking on any new subject is to ascertain by means of a representative conference that there is a volume of opinion favorable to the work being undertaken. If such is the case, the Main Committee nominates the chairman of a sectional committee to take up the work in question, this committee being formed of technical officers representative of the various government departments interested, representatives of the trade organizations concerned, and, lastly, experts in the subject to be dealt with. The Main Committee does not dictate in any way either the number of members or the personnel of the sectional committee, only reserving to itself the right to nominate the chairman, though naturally it is guided in this matter also by the advice of the members.

THE COMMITTEE INTERNATIONAL IN SCOPE

Although the activities of the association have in the main been confined to the home country, a considerable amount of work of an international character has been undertaken. At the present time the association is coöperating with the American Institute of Electrical Engineers in several directions in regard to electrical apparatus generally. Then there is the great question of the

standardization of screw threads and also of milling cutters and small tools, in connection with which the American Society of Mechanical Engineers will be able to render most valuable assistance. Indeed, there is a wide field for Anglo-American agreement on engineering standardization generally and the association looks forward to a large measure of intimate coöperation with this object in view.

In connection also with its labors outside the home country, the association is developing a scheme for assisting in procuring the wider dissemination of British standards, and is undertaking the translation of its more important reports into various foreign languages, as well as setting up, with the assistance of the Overseas Department of the Board of Trade, local committees of British engineers and traders in some of the more important trading centres of the world.

That the value and utility of the work of the association is becoming more and more recognized both at home and abroad is evidenced by the amount of new work it is continually being invited to undertake as well as by the inquiries received from all parts of the world both with reference to the standards and to the organization itself.

The most recent addition to the association's activities is that of the standardization of the details in the construction of ships and their machinery. A conference recently convened at the instance of the Board of Trade, and representing government departments, shipowners, shipbuilders and engineers, classification societies and consulting and naval architects, has unanimously decided to recommend to the Main Committee the setting up of a complete section to deal with this branch of engineering, in which, in common with all others, economic production, fostered by interchangeability of detailed parts, is of such vital importance.

This brief account will, it is hoped, be sufficient to show that throughout the Empire, British standards are receiving increased recognition as being of direct utility to the engineering industry generally. Standardization, after all, is no more and no less than proper coördination. To effect it may necessitate the sinking of much personal opinion, but if its goal, through wideness of outlook and unity of thought and action, is the benefit of the community as a whole, standardization as a coördinated endeavor is bound increasingly to benefit humanity at large.

National Welfare Through Standardized Reports of Industrial Experience

By JOHN W. RIEGEL

University of Pennsylvania

THE majority of American business men prefer to take a chance rather than act on the basis of facts. In many instances experience is never recorded and studied, and its lessons are disregarded.

Shortly after the armistice was signed a representative of the War Department visited a concern to close a contract and pay the actual costs incurred in its performance. The contractor showed him two drawers of papers and told him to go ahead. One drawer was filled with an accumulation of invoices; the other contained cancelled checks. Needless to say, the contractor still awaits a settlement.

Many attempts to set up adequate records fall short of their purpose. The results are characterized by inaccuracy, incompleteness and a lack of serviceability. Probably the figures turned in are derived from unreliable sources,—from memoranda which never are proven with the general books of account. The method of computation may be at fault. Frequently accurate data are presented in a fashion which discourages their study and employment. They are contained in unstandardized reports, which lack the comparative feature, and which are nothing more than a maze of figures.

About two years ago the superintendent of a certain Pennsylvania concern received a statement which showed that in one line of its product the cost of goods sold was twice the ruling market price. This report was allowed to remain on his desk until finally it was forgotten and thrown into the waste basket. Six months later the concern was insolvent. The most elaborate record system is of little value unless it leads to economies and improvements.

Record systems are lacking or they fall short because those in charge of industry do not insist on having something better. Owners and managers must be persuaded to renounce guesswork

control; they must be convinced that their industry or their concern can attain its maximum efficiency only when a true science is built up concerning it.¹

Running business by guess and gamble is a costly process. It results in unwarranted capital investment, with attendant methods of waste; it leads to overexpansion of credit, unprofitable marketing campaigns and periods of depression, with their sharp and painful adjustments throughout the entire economic structure. If production could be attended with less risk, and could be conducted according to sound principles, the nation's economic surplus would be enormously increased. Standardized reports of industrial experience are the basis upon which industrial science can be developed.

STANDARDIZED UNIFORM RECORD SYSTEMS

Standardized uniform record systems are not an innovation. The railroads of the country have been keeping their books according to a prescribed plan for almost a dozen years. It is true, however, that their detailed methods of cost-keeping are still in the process of development. State public service commissions are laying down accounting systems for water companies, for heat, light and power companies and for street railways.² The private industries of the country in a number of instances have taken steps along the same line. Noteworthy progress has been made by the manufacturers of machine tools, furniture, elevators, paper boxes, envelopes, cut glass and shoes. The printing and lithographing houses have been developing uniform methods of recording costs, equipment performance and personal efficiency. Bankers and brokers also have applied the principle of standardization to their records.

It is gratifying to note that this movement was given new impetus at the recent annual convention of the chambers of commerce of the United States, at which a unanimous resolution was passed favoring a system of uniform cost accounting in each industry. This endorsement, by approximately three thousand

¹ The Federal Trade Commission has estimated that 90 per cent of American corporations are without adequate cost data.

² See *Classification of Accounts and Special Forms* published by Bureau of Accounts and Statistics, Pennsylvania Public Service Commission.

men representing all lines of industrial and commercial interests, is a measure of the favor with which American business regards standardization in the matter of records and reports.

The breadth and force of this movement must be increased greatly before the time will be ripe for its application to industry in general. When complete and uniform record keeping is a matter of practice, a foundation of facts concerning our economic life will be available upon which many improvements in national welfare can be built.

SOME OF THE RESULTS THAT MAY BE EXPECTED

(A) *An Index of Efficiency*

American business has been termed inefficient, but no one can say to what degree, or whether it is more inefficient than the business of any other country. Efficiency is a relative term in any case. A widespread conviction exists, however, that there is plenty of room for improvement in the administration of the nation's business. The reason why there are comparatively so few failures under the circumstances is that business is inefficient generally, and the concerns that are on the ragged edge as marginal producers are simply less efficient than the rest, or they are operating under unfavorable conditions beyond which they have little or no control, such as poor location or limited capital.

The significant feature of industrial inefficiency is that not all concerns are lacking in the same respect. One is unusually well-managed in one department; the other is exceptionally strong in another department. The problem before each one is to find its "weak spot," and then take measures to correct the situation there.

The source of inefficiency could be located if composite statistics derived from the entire industry were in the hands of each concern. By comparing its records with the average, each one could discover in what respect it was unusually good or unusually bad. Of course the normal situation could be summarized only from accounts and reports kept and rendered uniformly throughout the industry. A complete composite record, currently calculated for each line of commercial and industrial enterprise, is the real statistical need of business. What the sales or costs were a year ago, compared with what they are at present, and other simi-

lar relationships, do not reflect the weaknesses of the concern as compared with its rivals. These matters are local history. To rely on them is like running a race backwards, with no knowledge of the speed of your opponents.

During the war the Federal Trade Commission compiled average figures of the costs of mining coal in each field where the general conditions of operation were similar. The array of facts which it collected show the possibilities of standardized reports of industrial experience. Suppose the chart covering the Illinois field were published and sent to the operators in that district. It would show that 30 per cent of the coal mined in the field cost x.xx; 50 per cent cost x.xx and 80 per cent cost x.xx; and schedules of component items would accompany the aggregate figures. Each operator could compare his costs with the standard computed from the reports of his business associates. Suppose his expenses were above the average. He could locate the source of excess cost, whether it is a matter of royalties, depreciation, wages, ventilation, drainage or what not.

Costs of production are but one side of the question. The chart also would show the average price received for the coal f. o. b. mine. Each operator could check his gross receipts per ton against the prices realized by the others in the field. The comparison would show the competency of his sales organization.

The extent to which detailed records of equipment performance and other similar memoranda are to be kept, could be prescribed with the assurance that the results would pay for the expense incurred many times over. The beater records in paper mills, the facts of oil consumption on the various divisions and in the several branches of locomotive service on the Louisville and Nashville Railroad, and the location, frequency and cause of breakdowns in pipe lines as recorded by many water companies are typical of the equipment data that can be used to save money.

Records of personal efficiency have a field of unbounded utility. Through them the worker can see his contribution to the product of the plant, watch his progress from day to day, and gauge his worth as compared with that of his fellows. A very optimistic view of records of individual workmanship was expressed by Mr. Robert B. Wolf, whose experience along this line led him to say:

The most democratic industrial plant is the one which permits the fullest amount of individual freedom to each member, irrespective of his position, and, at the same time, is so sensitively adjusted that *it reflects immediately the result of his actions*. If his actions result in injury to others he will see that as a part of the whole, he himself must also suffer. An organization of this kind can never be used by the employer to exploit the employe, for *it will continually be demonstrating to both that the success of any one part of the organization is absolutely dependent upon that of every other part, and therefore upon the success of the whole.*¹

There is no intent to convey the impression that a system of records can be evolved which will give ready-to-use formulae that can be applied by a novice to reveal the vital facts of any business or of industry in general. Figures and data must be used by those who understand the conditions underlying their derivation, otherwise the most unwarranted assumptions may be made. For example, a flat comparison of the expenditures and revenues of railroads throughout the United States would be most misleading on account of the different physical and economic regions in which they operate.

Some will say that any situation reflected by statistics can be explained or excused by a party intimately associated with it. This may be so in the first instance, but a constant course of explanation on his part is pretty good evidence of an unsound condition. Moreover his supply of excuses will diminish and detection will become correspondingly easy.

The provision of a "clinical thermometer of industry" through composite statistics will point the way to progress, but it will do nothing of itself. Statistics will aid in the diagnosis, but they will not effect the cure. The management of the concern must apply the proper remedy.

(B) Capital Will Be Directed to Productive Fields

The financial interests of the country will be benefited by standardized reports of industrial experience. The investing public will be furnished with facts concerning the normal realization on investment in many lines. The concern that is not up to the standard can be noted. Dividends alone will no longer be the criterion of value,—assets, liabilities, revenues and expenditures can be intelligently scrutinized. The buyer of securities will have a guide to aid him in the investment of his funds.

¹ "The Creative Workman," Technical Ass'n. of Pulp & Paper Industry, New York, 1918, p. 13.

Banks and credit advancing institutions insist upon a financial statement from the borrower before they decide upon the line of credit to be extended to him. Suppose that bankers were provided with figures showing the normal conditions in the industry, —the average relative strength of the several items on its balance sheets and the average earning power of the concerns engaged in it. Decision upon the proper line of credit to allow would be facilitated, risk would be less, other things being equal, interest rates would be lower, and the loss to the public through the misdirection of the flow of capital would be materially lessened. The development of standard business records will also be a means of safeguarding against the contraction of bad debts, since the debtor's statements could be readily analyzed, and his limit of credit decided with assurance.

Where the management of an enterprise is separate from the ownership, as frequently obtains with corporations, the owners could carefully review the work of their administrative agents. Composite data secured from uniform records would be the means of fashioning the strongest sort of a club to wield over the heads of inefficient managers. The ownership would be able to criticize the conduct of the business in the light of the experience and progress of its associates in the same industry.

(C) Facts Will Be Available for the Discussion of Problems of Wealth Distribution

The problems connected with the distribution of wealth are further from solution than those concerned with its creation. Facts about the distributive process will be of the greatest help to those who are trying earnestly to establish more equitable relations between capitalist, manager and wage-earner.

"Profiteering" has been decried over the length and breadth of the land, and the "profiteer," whoever and wherever he may be, has been branded a traitor and a scoundrel. But who is a "profiteer," and just what is "profiteering?" These terms have not been defined, nor can they be until the shares of the surplus wealth taken by each of the groups engaged in production are known. Only then can the public decide what a "fair return" and a "fair wage" is, and who the "profiteers" are. It may develop that those most vehement in their denunciations are not without sullied hands.

If a system of records is used to establish new piece rates which lower the wage for an equivalent amount of work, it will be serving a perverted function. On the other hand, if it is a means of promoting industry, initiative and loyalty, and a device which selects those to receive increased wages and be given places of larger opportunity and responsibility, it will be employed in the best interests of all. The immediate results of a perverted use of uniform records will blind the public to the more or less vague benefits which they promise in the distant future.

Complete and standardized records of industrial experience will be of tremendous value to a board of labor arbitration. The figures will stand for or against the worker according to the way they compare with the general wage level in his industry or in other industries in which the work done is similar to his own. Knowledge of the facts will further a compromise of justice, and will enable the public to voice its approval or disapproval of the award.

While the identity of the individual company was not disclosed, the records of the Federal Trade Commission showed that one operator was charging over a dollar for administrative salaries and expenses per ton of coal mined. Most of the companies were charging under ten cents per ton for this item. A discrepancy so large is unwarranted on its face, and would seem to indicate an abnormal appropriation of the earnings of the mine by its managers. Suppose this were the case, and the wage-earners were suffering in consequence. Would not a board of arbitration have some very good evidence upon which to act?

(D) The Education of the Consumer Along Economic Lines

Information concerning the cost of doing business, the gross return for goods and services sold and the net income to owners, managers and workers will be a means of educating the consumer along economic lines. One of the sources of economic discord in the past has been the consumer's ignorance of the effect of his whims and desires upon the machinery of production. To what extent could the welfare of the nation be promoted if the consumer were educated to approximate his demands in all lines to the available supply as he was in a few respects during the recent food and fuel conservation campaigns?

In seasonal industries production runs at top speed for a period, and then it is discontinued for probably the balance of the year. As a consequence capital and labor are alternately overworked and idle. This condition results in general inefficiency and high prices, not to mention the distress of the workers affected by unemployment. Another opportunity for the conservation of waste through the education of the consumer is to teach him to give increased favor to standardized articles. If the public knows about the problems confronting its business, it can better mitigate the suffering and friction they cause, and coöperate to further their solution.

(E) Improved Public Regulation

Standardized methods of record keeping will promote the intelligent regulation of business. Too frequently our laws along this line have been the result of public indignation, factional agitation or group prejudice. Provision must be made for the collection of facts upon which to base economic legislation in the future.

Statistics derived in a uniform way in each industry and made available to the States can be used along the line of labor legislation, for the prevention of industrial accidents and diseases, the establishment of systems of state insurance and pensions, the treatment of wage disputes and the taking of other measures to further the welfare of the worker. They will aid the States in their regulation of incorporation, their programs of taxation, and promote business regulation which is constructive rather than restrictive in aim.

These figures can be used in building up our tariff schedules in a scientific way. Our federal taxation plans can be revised to apportion the incidence of the burden more equitably upon the several economic groups in the community because their respective abilities to pay will be known more definitely. The regulation of interstate commerce would be facilitated by uniform industrial records, and reasonable and unreasonable restraints of trade could be distinguished more readily. The function of regulation could be made administrative rather than judicial in its operation. If the federal government is to engage in positive assistance, or even own and operate industrial enterprises, let it do so on the basis of facts. Marine insurance and ship subsidy are cases in point.

(F) The Fruits of Industrial Coöperation Can Be Enjoyed

Wasteful duplication of effort, the constant tendency to discord and diminished returns and the lack of coördination which characterize the régime of competition are giving rise to a growing conviction that it is a costly regulator of trade. Coöperation promises many benefits and economies, but it is also fraught with many dangers. It can be permitted only under adequate public regulation; otherwise it might lead to abuses which would violate and stamp out freedom of opportunity; it might lead to the wanton curtailment of service and the arbitrary elevation of prices through monopoly power. Regulation of coöperation should be founded upon uniform records turned in to the regulatory body. It will be recalled that the regulation of the railroads under the act of 1887 was greatly handicapped until the uniform system of accounting was prescribed and adopted under the provisions of the Hepburn Law.

The movement toward industrial coöperation is shown in a concrete manner by the following resolution which also was passed at the recent convention of the chambers of commerce:

The war has demonstrated that through industrial coöperation great economies may be achieved, waste eliminated, and efficiency increased. The nation should not forget, but rather should capitalize these lessons by adapting effective war practices to peace conditions through permitting reasonable coöperations between units of industry under appropriate federal supervision. The conditions incident to the period of readjustment render it imperative that all obstacles to reasonable coöperation be immediately removed through appropriate legislation.

The industries of the country that are progressive are urging coöperation under governmental supervision. To be adequate this supervision should be based on facts, and the business of the coöperating units must be made public, therefore, to a degree which will enable regulation satisfactory to them and to the people at large.

DIFFICULTIES IN THE WAY

The difficulties that confront any agency that undertakes the work of installing a uniform record system are grave indeed. First of all there is the construction of a generally acceptable and workable system,—one that will give accurate results quickly and economically. There is the further problem of securing widespread

adoption of the plan as worked out, and seeing that the orders are followed in letter and spirit by a great number of concerns. The experience recorded would have to be collected and disseminated and be of benefit to the industry and to the public. The reports and advice of the central compiling bureau would have to be recent enough to be news rather than history; the composite figures would have to be taken from businesses operating under the same general conditions and confronted with the same general problems; moreover the periods covered in the reports would have to be of the same duration in order to be comparable.

The Plan Must Await Public Consideration and Approval

Uniformity in record-keeping cannot be installed successfully from above. If this is done the systems will be regarded as burdens,—as more legislative interference. When the majority of American business men concur in the resolutions of the chambers of commerce, the time will be at hand to consider the application of the abstract proposal to have standardized records of industrial experience.

Grading and Standardization in Marketing Foods

By W. F. GEPHART

Washington University. St. Louis, Mo.

THERE has been much discussion recently with respect to the importance of a standard unit of value both for this country and for the great international trading nations. This is important not only because of the bearing that such a changing standard of value has on trading within any single country but also because of the enormous development of international trading. The United States and its products have become such an important factor in the international markets of the world, that we can no longer be indifferent as to standards of value. There are peculiar difficulties to be encountered in arriving at such a standard which would be stable, in a country with such a diversity of industry and area as the United States—not to discuss the added difficulties which are met when exchange among various countries arises.

The standard of value is, like all other standards of measurement, partly a result of law and partly a result of custom. But, since the unit of value must measure all other goods, its real or other goods value and its continual change in this goods value are difficult to express in some one standard or in static, unchanging values.

Then, too, this unit of value or the material of which it is now composed has in itself value in terms of other goods. It satisfied the desire of consumers for other than that of measuring the value of goods; whereas, other measuring units, such as the yard, the bushel or the pound, have in their representatives little actual economic good. If the metals which go to make up the unit of value did not thus have the value in the arts and sciences, it would be easier in using them to arrive at a static or stable measuring unit of value.

This standard of value, as contrasted with other standards of measurement, affects not only the immediate exchanges in a given market at a given time but also exchanges to be made in a

future market,—for example, in the transactions of debtors and creditors. Thus a given sale of credit for a consideration may at the actual delivery or payment represent either more or less than the amount of exchange when the contract was made. But in the ordinary transactions of the market, the use of other standards of measurement, however variable they may be in different markets, does not ordinarily, if confined to a single market, work any injustice on either party to the trade or transaction.

When A borrows \$100 of B, he may later pay more or less than \$100; but when there is a transaction between two parties involving, for example, 100 bushels of wheat, the bushels of wheat to the respective traders mean ordinarily the same thing. However, in the case of many commodities where the trading involves an exchange between dealers in different markets, confusion and difficulty arise approximating that to be found when the standard of value is of prime consideration.

It is not intended here to discuss primarily the inconvenience and losses resulting from the fluctuating standard of value, either in the same nation or between different nations, but to suggest some aspects of the importance to the market of developing standards and grades for food commodities. Frequently, discussion of the significance of changes in the standard of value seems to neglect the fact that there is an equally serious lack of uniformity in other standards of measurement. This is especially true in the United States where there are to be found many different standards of measurement of ordinary food commodities, and at the same time a very general absence of grading of food commodities.

VARIETY OF STANDARDS AND ABSENCE OF GRADING

The explanation of this great variety of standards and the general absence of grading is not far to seek. Owing to the great extent of the country, the scarcity of population and the wide separation of the settlements for many years during the early history of the United States, there was but a limited amount of trading among these groups. The market was in a large way a local one. There was also a great variety, even in the earlier period, of products and resources from this country. Then, too, the lack of transportation facilities and other means of communication between the widely separated settlements, all conduced

to restrict trading within the group. Therefore, great varieties of measuring units developed, each community selecting whatever seemed to answer its own needs, and thus were perpetuated through custom and use these numerous standards.

It was not until the population had increased along with the development of transportation facilities and other means of communication, that inter-group trading developed and these varieties of standards came to the notice of the traders. Even then the importance of the national and international market was much less than that of the local market, especially since the few products moving to the international market consisted of wheat and other staple commodities, such as cotton, in which any local differences in standards could in the international market easily be unified.

Another factor which has greatly contributed to the variety of standards is that of the character of our political organization. The federal government, the state governments and the local governments, each have under our theory of distribution of political power, authority to establish standards and grades for food commodities. The federal government has not until comparatively recent times been very active in this respect, and hence the state governments and the local governments—especially those of the larger municipalities—have been free to exercise their ideas on this subject. The result has been that the numerous state and city governments have passed laws establishing a great variety of standards and grades for food commodities.

Not only has there been lack of uniformity even between the states, but in a single state a state standard has frequently differed from that of a city or cities within the state, so that the result has come to be that for a particular commodity there may be a federal standard, or grade, a state standard or grade, and a city standard or grade. It is true that this is an extreme illustration of the variety, but examples can be found where there is this degree of lack of uniformity. Certainly the states have power to establish standards in grades for intra-state movements of food commodities different from those of the federal government. It may be a debatable question whether, under some state constitutions, city governments have the power to establish standards and grades different from those of the state. In any event, either

through the absence of prohibitions in the state constitution itself, or because of the strong force of custom, the above three-fold variety in standards does exist. The people of the particular community or section of the country thus become accustomed in their dealings to the standards of measurement and are loth in their exchanges with buyers and seller in other markets to accommodate themselves to the standards used in other markets.

Many examples of these variations in standards of measurement could be cited. For instance, in the case of the eight leading cereals in the United States, there are twenty-three (23) different bushels in use. The size of the hampers which are used in marketing certain food commodities, both perishable and non-perishable, differ very greatly. In the packing and selling of hundreds of commodities entering into various markets, the decimal system is sometimes used; and in other cases the dozen and gross, without any evident reason except custom to explain one or the other methods. Great confusion and inconvenience result from these variations in standards of measurement, and the adjustment necessary to be made represents an enormous outlay of time and money.

Then, too, the consuming public, as distinguished from the trading public, tends to perpetuate this unfortunate confusion. The average consumer, for example, does not like to buy potatoes or eggs by weight, for he has been long accustomed to buy these commodities either by measure or count. Vegetables are purchased by the bunch because that has been the accustomed method of marketing them.

ATTEMPT TO STANDARDIZE UNITS OF MEASUREMENT

There have been many examples where an effort has been made to standardize the units of measurement, and the reform has not been able to be made because of the opposition of the public or its indifference. Laws are passed or ordinances are enacted with respect to the establishment of standards of measurement, and they remain unenforced because public sentiment will not support the regulation, notwithstanding that in many of these cases the consumer is the one who would benefit the most from the observance of certain standards. Whether eggs are sold by weight or by the dozen makes a very great difference in the final result to the consumer.

An actual case in point can be cited of two large cities, located in different states, which draw their supply of eggs from the same general territory. In one city there is a regulation requiring eggs to be sold by weight; in the other, there is no such regulation. The very natural result is that in the egg-producing area the small eggs go to the market which has no regulation requiring their sale by weight.

Even in the case of such commodities as meat products, there is little uniformity in the preparation of the cuts for the market in different sections of the United States. This is especially true of beef and mutton, so that the result is that whenever an effort is made to compare prices of such an important food commodity as beef, great difficulty is experienced. Not only is there the necessary difference in grading the quality of the animals themselves for the market, but even the meat of the same grade of animal is prepared for the market in different ways, so that there is a great variety of cuts and very little actual correspondence in the same cut in different markets. It is very much a question whether the reforms needed to be made in the case of standardization and grading should concern themselves first with the commodities which are so directly of interest to the people as daily buyers of food commodities in the market or with those staple food commodities which move in interstate trade, and are of interest primarily to producers and traders.

DISORGANIZED FIELD OF UNGRADED FOOD COMMODITIES

All of what has been stated above has had prime reference to the establishment of standards of measurement. There still remains that very large and important disorganized field of ungraded food commodities. Scarcely a beginning has been made in this country in grading food commodities. What little has been done has been the result primarily of the activities of the federal government and not of the state or local governments, although not a few states have grading regulations of one or more important food commodities if they are produced in large quantities in the state. Some progress has been made in grading such commodities as wheat, potatoes, and a limited number of other food products.

Very well recognized difficulties are met when it comes to the

establishment of grades of food commodities. One of the greatest difficulties is the fact that a particular commodity which is sought to be graded is produced in so many different sections of the country, and varies in these sections so considerably with respect to size and quality, that a uniform grading law for the country as a whole might work a very great hardship on certain classes of the producers of this commodity. For example, if the grading in the case of potatoes is partly a question of size, difficulties are encountered, due to the fact that this product varies very considerably in size in different sections of the country, without a corresponding difference in quality.

It is probably true that grading laws should be considered primarily from the viewpoint of the dealers in these commodities; that is, the grower and distributor, rather than primarily from the viewpoint of the consumer. In other words, grading regulations are primarily of value as an adjunct to more advantageous marketing.

It is not true that grading regulations can be applied to any and every food commodity. There are very definite limits to grading and standardization regulations, and the attempt to establish them for all grades of food commodities would only lead to greater confusion than that which now exists. There can be, however, no difference of opinion as to the need for improved grading regulations and an increased number of uniform standards of measurement being established to facilitate not only the better marketing of food commodities, but also to confer a distinct advantage upon consumers.

The United States has passed out of its pioneer stage of industrial development. The local market has given way to that of the national market, and that has been succeeded in the case of many food commodities by the international market. The absence of standardization and grading, except as it was found in the particular local market, was of no particular significance in this earlier period. But now that buyer and seller are often separated by hundreds of miles, and therefore the commodity cannot be inspected nor samples sent, it is necessary that some means of conveying exact and accurate information to the buyer of what the seller has to sell be devised. The awkward method is yet used, in the case of some non-perishable food commodities, of sending

samples of the goods to be sold, whereas if there were an adequate, established grading law this would not be necessary.

In some cases producers in the United States have gone farther than those of any other nation in standardizing products, especially those of the machine industry and many other manufactured articles. The interchangeable part is a characteristic of American machines, and standard equipment has come to be a common thing in many lines of manufactured commodities.

Little, however, has been done with respect to food commodities. As has been suggested, the difficulty in arriving at a reformed system of standards and grading consists partly in the divided political authority over such matters, and partly in the fact that custom does not readily give way to a superior system. An improved situation may be brought about in several manners:

1. No political action or propaganda for the change might be taken up, leaving the whole condition to bring itself to bear in all its confusion more and more upon the people, and gradually, in time, through a recognition of these difficulties, a change looking towards uniformity might be made. This doubtless would be of very slow progress.

2. Another method of improvement might be adopted by leaving the whole matter in the hands of the trade groups themselves, in the belief that they would gradually bring about improved standards and grades.

3. An appeal to the governmental action might be made. This would seem the most promising of all, but a difficulty might arise in connection with using the government as an agency of reform. This has already been suggested in the divided control that exists between the federal and the state governments over the subject of standardization and grading.

It would seem, however, that in a situation such as this, where custom is long established, where there is great variety in practice in different sections of the country, and where divided political authority exists, a peculiarly good and promising field of activity is furnished to the federal government. The central government might well afford to take the lead by gradually increasing its regulations establishing standards and grades for food commodities. This would be not only a standard for interstate shipments, but because of its uniform nature the states would doubt-

less adopt the same standard and grade as that of the United States.

Indeed, in those few cases where the federal government has already established standards and grades, there has been a marked tendency on the part of states and cities to modify their laws and regulations, in harmony with those of the federal government. The Department of Agriculture and the Bureau of Standards of the federal government could, after careful investigation, suggest standards and grades for many food commodities.

The purpose of such standardization and grading should be the facilitating of the marketing of these commodities, and as an incidental result, the consumer would be greatly benefitted. The matter is not at all simple, for it will mean not only a change in state regulations but, what is even more difficult—a change in trade practices. In many cases of foods as well as other commodities there has grown up in the trade a system of grades that has little to justify it. It is frequently unnecessarily complex, and often too great a number of grades are established. These numerous grades are partly a result of historical development, and very often the commodity as now marketed does not justify such a large number of grades.

If a system of standards for measuring food commodities, and as simple as possible a system of grading were established, not only would the marketing of them be facilitated but the consumer could acquaint himself with grades of food commodities. At the present time he is frequently a victim of the distributor. He does not know what constitutes a number one product, and any system of grading ought to be not only limited as to the commodities but also simple as to its structure.

We need a great education of the buying public on food and food values. A proper system of standards and grading will conduce to this end.

Standardization and its Relation to Industrial Concentration

By HOMER HOYT

¹ Economist, Washington, D. C.

THE advocates of standardization may be surprised to learn that they are also committed to a policy of concentration of industry, yet that is the inevitable goal towards which their principles are carrying them. Standardization and the competitive spirit cannot live amicably together; one always tends to destroy the other. Thus if standardization be attempted under competitive conditions and if a number of rival firms undertake to manufacture the same standardized article, competition is entirely on the basis of price and the concern which can produce at the lowest cost and consequently sell at the lowest price will undersell its rivals and drive them from the field. Moreover, if standardization is retained, the progress towards monopoly proceeds at an accelerated rate of speed because every inroad which the largest concern makes upon the markets of its rivals may increase its output and lower its overhead cost per unit of product, and correspondingly decrease the output and raise the overhead cost per unit of product of the smaller firm. In those industries where unit costs decrease with volume the largest concern can use the very trade gained by price cutting as a basis of lowering prices still more, while the smaller concern with every loss of sales is either forced to raise prices or to increase its deficit at a progressive rate. Wherever standardization thus makes mass production under conditions of heavy fixed capital the most economical, competition will die of its own excesses and a combination of firms—in which each plant specializes on a given part of the standardized article or in which the most efficient plant manufactures all the articles under the most favorable conditions of quantity production—will be the only stable form of business organization.

Even as competition thus fails when standardization is master, so also is standardization overthrown when competition is kept in the saddle. For the only way by which rival manufacturers

¹ Mr. Hoyt is now economist of the War Trade Board, Washington, D. C.

can escape from the excessive price competition that destroys all competition is to transfer the competition from the plane of price to that of quality by splitting up the standardized product into many brands that are distinguished from each other by slight differences in size, shape, color or design. Since the consumer cannot properly appraise the pecuniary value of these intangible and aesthetic differences, he cannot readily compare prices of different brands and he thereby loses his power to stimulate cut-throat competition between manufacturers. On the other hand, when a producer makes his own specialty which is not exactly like the goods of any one else, he enjoys a narrow range of monopoly control over price, the power of which varies according to the strength of the consumer's preference for his particular brand. The device of the specialty not only tends to perpetuate competition and small business because it prevents ruinous price competition, but also because the production of unique patterns and ornamental designs that appeal to a narrow market and that require frequent change of manufacturing process neither requires large scale operation nor partakes of its advantages. Thus the independence and competitive freedom of the firms in an industry are maintained by the sacrifice of standardization.

Hitherto, competition has in the main prevailed over standardization among American manufacturers so that we have been showered with a vast multitude of slightly different brands. The chief result of this tendency has been to give the American consumer almost unlimited power in directing what styles of goods should be produced. American manufacturers have not attempted to exercise autocratic powers over our daily life. American consumers have not been forced to lie in an iron bed of Procrustes of standard dimensions, but they have had their choice of iron, brass and wooden beds of manifold sizes and designs.

The variety of design in ordinary articles has given full opportunity for the satisfaction of the most fastidious tastes; the discriminating judge of chairs had 518 patterns of piano stools and a countless legion of ordinary chairs from which to make his choice; the connoisseur of plows and cultivators could undoubtedly find the style dictated by his own individualistic notions from the varied assortment displayed by the agricultural implement dealers;

and anyone who was particular about the appearance of the interior of his house could spend his lifetime in turning over samples of wall paper. From the cradle to the grave, from the many varieties of cribs and baby carriages to the profusion of styles in burial shrouds and coffins, the American consumer has been unrestricted in his choice.

In order to satisfy his eccentric notions, however, the American consumer is compelled to forfeit the benefits of standardization. He cannot buy a standard limousine, standard units of clothing graded according to wool content and durability, standard sets of furniture, and standard canned goods of guaranteed purity, weight and quality, but he must select the kind and quality of goods he desires from the bewildering array of similar brands in our national window display. Not only must he spend his time in appraising ornamental or superficial differences between slightly different brands, and in educating himself against the wiles of the salesmen who would sell him an inferior brand with a similar label, but he must spend money for his liberty of choice. The extra materials and labor required by the ornamental features of the brands, the risk of special brands going out of style and the luxury of hand made and small scale production, must be paid by the producer and passed on to the consumer. The production of a medley of brands is also undesirable from the point of view of the manufacturer and of society. The manufacturer is limited in his market because the specialty lacks the wide range of demand possessed by the standardized article, and he is deprived of the benefits of large scale production. Society loses on account of the wasteful application of its resources.

Some of this individuality of style is worth its social cost. A society in which everyone rode in Ford cars and lived in uniform cement houses would be monotonous even though it were the most economical. It is also true that some differences in size and style are required by the exigences of industry and natural individual differences. But after allowing for these necessary minima, a further indulgence of individual eccentricities merely lessens the surplus capital that might be used for the cultural expression of a people along lines where fine differences count for the most in artistic effect.

In view of the counterbalancing disadvantages of a profusion

of brands, it would seem that our long-cherished liberties—of having so much to choose from that we cannot make an intelligent choice—are not worth clinging to. The economy of standardization makes a strong appeal to consumer and producer even in times of peace. When the exigencies of war also required standardization, the American public was quite willing to sacrifice its theoretical freedom of selection. The war—with its imperative demand for the mass production that was necessary to deluge the enemy with steel and to overwhelm him by superior weight of men and materials and with its insistent demand for the economy of material and shipping space that increased our supply of war material and that widened the neck of the bottle through which these supplies were sent to the battle front—compelled a degree of unification and standardization in American industry that has never existed before. American business men who standardized their products as a part of the team work that won the war also tasted the fruits of the economies of standardization and they now hesitate to return to the old competitive struggle and its diversification of brands.

Combinations were necessary to secure the standardization that was adopted during the war just as combination is necessary to secure standardization during peace. The war service committees that were organized in each trade under the United States Chamber of Commerce were the temporary war-time consolidations that substituted some degree of uniformity and standardization for an every-man-for-himself policy. These ephemeral industrial pools, formed only for the period of emergency, derived their binding force and their resulting powers to compel standardization chiefly from the spirit of national sacrifice. Permanent industrial combinations to effect standardization must run the gauntlet of an entirely different set of social conditions; they must meet the test of industrial fitness and the scrutiny of the law. The economic advantage of the standardization effected by these combinations has already been indicated,² but the legality of these combinations in times of peace remains to be discussed.

The existing law runs absolutely counter to the great combinations that would sponsor standardization. While standardization itself is not prohibited by the law, the only methods by which

² *Supra*, p. 284.

thorough-going standardization can be attained, i. e., by combination, are declared to be unlawful. The very suppression of the individualistic tendencies of manufacturers and the unanimity of all the firms in an industry that is necessary to secure standardization would result in that preponderating degree of control which is prohibited by the Sherman Act. The circumstance that the combination of industry was for the beneficial purpose of lowering costs by large scale production would not blind the eyes of the court to the fact that the keen competition over staples was thereby effectively restrained. The very power which arises out of great combinations is itself illegal, regardless of the mode of its exercise. There is no "good trust" except those raised under the Webb-Pomerene Act.

The way towards standardization thus lies between the whirlpool of ruinous competition and the sharp rocks of the Sherman Act. If one business man manufactures a standard article without some price agreement with his fellow manufacturers, he is faced sooner or later with a fierce price competition which ends in the survival of one firm. If all the business men in a trade agree to manufacture a standardized product without excessive price competition, they are guilty of violating the anti-trust statute. Standardization in minor details may be permanently maintained under competitive conditions and standardization on a large scale may survive the competitive struggle for a time; but the full benefits of standardization can be permanently reaped only by the great combinations that are frowned upon by the Sherman Act.

This breach between the economic advantage and the law in regard to standardization seems to be widening, and sooner or later a change must come. Either the law or the economic forces must yield. The law is the first to show signs of bending. The Webb-Pomerene bill permits combinations for export business, and since that necessarily means perfect harmony among all the firms of a domestic industry for the one purpose of foreign trade, it will be difficult indeed to cause these firms to fight in the other purpose of domestic business. The concession made to combinations by the Webb-Pomerene Act may prove to be fatal to the entire structure of anti-trust law.

The movement towards concentration will of course be resisted

by whatever competitive spirit exists among American business men, and if that combative inclination be strong, we may look for an increasing multiplication of brands instead of standardization. The strength of individualism among consumers—the desire of war-worn soldiers for variety and the pent-up demand of the civilian population for another round of the pre-war fads and luxuries—will contribute its influence towards increasing variety in goods. The necessity of giving employment to discharged soldiers will also be a potent excuse for producing useless frills that require an extra expenditure of labor power, in spite of the economic fallacy involved in such an argument.

As competition thus struggles to retain its former mastery over production, the forces of industrial combination and standardization are slowly mobilizing. The unification of the wants of all nations and the unification of the control of industry are sweeping us onward toward the quantity production of staple goods. Varied standards of style and fashion within the United States are being merged into one by the centrifugal force that is tearing down the barrier between the North and the South, and that is effacing the frontier which separated the West from the East, while throughout the world the differences in dress and tastes have been lessened by increasing social intercourse.

While this unification of wants is taking place, standardization and concentration of industry are also growing. As the foreign demand for American goods increases because of a market expanded by our new international relationships, by the increasing speed and carrying capacity of ocean steamers, the wider extension of our credit and reputation abroad, the universalization of wants accomplished by fraternizing with our Allies, and the vacuum in trade caused by the prostration of Germany, there will come an increasing tendency towards large scale production along lines hitherto operated as small scale units. As we develop more and more into a manufacturing nation, using our own resources for our own mills, feeding raw cotton to cotton mills even as steel is sent to the steel mills and thereby establishing integration on an ever-increasing scale, the industries of this country will be knit more closely together.

As some American industries thus tend to expand into monopolies of world-wide scope, foreign combinations of trades that

possess an advantage over similar American trades will also attain monopoly size by entering our markets and exchanging their wares for the products of our monopolies. In this merciless international competition, the small business unit will lose even the little market that it has, and the industries of the world will become concentrated into monopolies that from manufacturing centers located at the points of greatest geographical advantage will send their standardized products by swift and cheap carriers to the farthest recesses of the Orient and the developing jungles of Africa and South America. As the relationship between all nations thus becomes closer and more apparent, individualism, the pioneer spirit and the era of small business will pass from the United States.

Many business men already see the change forecasted in the industrial barometer, and they are preparing for the time when the legal dyke will no longer be able to hold back the gathering flood. In the meantime the prospective dangers of unregulated monopoly should hasten the preparation of new instruments of social control. We must draw the fangs of our new-born monopolies before they use their adult powers to seize control of our political and financial machinery for their selfish ends. The practice of standardization will create a new fund of wealth, but we must control the forces that bring it forth so that the masses of consumers will share its benefits.

The Work of the Bureau of Standards

By P. G. AGNEW

Physicist, Bureau of Standards, Washington, D. C.

ALL of the more important countries have found it necessary to set up some governmental agency for standardization and research work in physics, chemistry and technology. These institutions have exerted and are exerting a profound economic influence, in the past by reducing the confusion in weights and measures from which commerce and industry have largely emerged, and at present in clarifying allied subjects in which more or less confusion still exists. In the more highly developed institutions, more complex problems, such as standards of quality, are being undertaken, which frequently involve extensive physical and chemical research. Such problems are of great importance to extensive branches of industry.

The three countries in which the organization has gone farthest are Great Britain, Germany and the United States. The first institution to be established on a modern scale was the *Physikalisch-Technische Reichsanstalt*, which was established in 1887. This is a standardizing and research institution of the highest class. Germany has two other institutions, the *Normal-Eichungskommission*, which has control of the weights and measures of trade, and the *Materialprüfungsamt*, which, as the name implies, is devoted to testing and investigation of materials of various sorts. The latter institution is under the control of the state of Prussia.

For many years Great Britain has maintained a Standards Department under the Board of Trade. This has charge of standardization and inspection service and general administration of trade weights and measures. The most important British institution of the kind is, however, the *National Physical Laboratory* which was founded in 1898 by the Royal Society and has since been maintained by it with the aid of governmental grants. Recently, as a part of the reconstruction program in research and standardization, the direction of the *Physical Laboratory* has been taken over by the Department of Science and Research. Hereafter the work of the two institutions will be unified.

France has the Laboratoire d'Essais, the Laboratoire de l'Électricité, and has made other provision for such work. Plans have been drawn for establishing a strong centralized institution covering the whole of the field. The Department of Communications of the Japanese Government maintains a well equipped research and standardization laboratory. Other countries, including the British Dominions, have similar institutions, although not so extensive. As a result of the war and the innumerable technical problems arising from it, a great interest has been awakened in the type of research and standardization work carried on by such institutions, and there has been a considerable activity all over the world in establishing new institutions for such work, and in strengthening institutions which were already in existence.

Our Bureau of Standards, which was founded in 1901, is the only one of the national laboratories which covers the whole field in a single institution. In a general way it may be said to cover the same field that the British and German institutions do. There is the difference, however, that the bureau is not charged with the general legal administration of weights and measures laws, but its facilities are to be used for the improvement of weights and measures, for securing uniformity in state legislation concerning weights and measures, and in the administration of such legislation.

The work of the bureau is very extensive as may be seen by reference to the Annual Report of its activities which covers more than 200 pages. The work falls under three general heads: Standardization, Research, and Testing.

Manifestly it will be possible in a brief review of its activities to mention only a few of the more typical phases of the work. Moreover these will be chosen primarily to illustrate the activities of the bureau in the field of standardization. Some idea of the scope of the work may be obtained from the divisions into which the administration of the bureau is divided:

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|---------------------------|-----------------------------|
| I. Electrical | VI. Engineering Instruments |
| II. Weights and Measures | VII. Materials Testing |
| III. Heat and Thermometry | VIII. Metallurgy |
| IV. Optics | IX. Ceramics |
| V. Chemistry | |

Each of these divisions does standardization, research and testing work in its own field. The standardization work has primarily to do with the scientific and technical side rather than with what may be termed commercial or industrial standardization.

FUNDAMENTAL STANDARDIZATION

One extremely important phase of the bureau's work is that in connection with the fundamental units of measurement and their realization by means of concrete standards. One not intimately familiar with the work is likely to think of it as having been already accomplished. This, however, is far from being the case, and much important and painstaking work requiring the highest type of scientific training and experience remains to be done even in the older subjects. There are important fields in which only the merest start has been made.

The scope and the difficulties of the problems involved in such fundamental standardization are not generally realized. To secure agreement on the definition of a unit a great deal of investigation and discussion involving many conferences is necessary. After the theoretical definition of the unit has been agreed upon, it has to be translated into some form of concrete primary standard. Means must be provided for translating measurements from the primary standard to the reference standards of testing laboratories, and these in turn to the reference and working standards of manufacturers and others who must use them.

Unfortunately there is a widespread popular notion that the bureau's work is limited to standards of length and mass, but it has to do with many other units and standards of a fundamental nature, for example: the electrical units of resistance, electromotive force, current, inductance and capacity, the temperature scale, the calorie, standards of wave length, candle power, color, and others. Work on fundamental subjects involves coöperation with various technical organizations, including national laboratories of other countries.

During the early years of its existence a great deal of work was done by the bureau on the fundamental electrical standards, and international agreement was reached on some of these. Much, however, remains to be done. For example, final agreement has not been reached upon the details of the primary standards involved in the measurement of electric current itself.

Standards of Candle Power

One of the most important phases of the bureau's work on fundamental standards has been that in connection with standards of candle power. When the bureau took up the subject, the unit of candle power used by the gas industry differed by some 2 per cent from the unit in use by the electric light industry. The units in use in various countries showed similar differences. There was not, and in fact there is not now, an American national legal standard. After years of the most careful work, not only a national but an international agreement on the unit was reached. (This does not include Germany whose standard differs by 10 per cent from that of other nations.) The actual concrete standard by which the unit of measurement is realized is a group of carefully selected and seasoned electric incandescent lamps which are burned under the most carefully specified conditions. Groups of these lamps were prepared by the bureau and furnished to the national laboratories of France and England for comparison with similar groups used in those institutions. While nominally the different countries base their units on different standards, in practice the units are maintained by these groups of electric lamps by means of which international agreement was obtained. This work has had a profound and far-reaching influence upon the development of the industry. While the cost of the work ran into many thousands of dollars, the expenditure is wholly insignificant in comparison with the economic advantages that have accrued to innumerable branches of the national industry.

The Temperature Scale

A similar problem has been undertaken in connection with the standard scale of temperature. As in other cases involving standardization of a fundamental nature, a vast amount of difficult research work has had to be done, and more remains to be done. The international Bureau of Weights and Measures had already done considerable work on the subject when it was actively taken up by the national laboratories. As in other cases the necessary research work ramifies into many other fields; for example, in the case of the temperature scale, work was necessary in the theory of radiation, in the electrical conductivity of metals; thermoelectric properties of metals, the compressibility of gases, and many other fields of physics.

When the European war broke out, considerable progress had been made toward an international agreement on the temperature scale. While such an agreement had not been reached in detail, the bureau has been able to establish the temperature scale with accuracy.

The work of the bureau on the higher ranges of the temperature scale has been extremely important in the development of technical pyrometry, the measurement of high temperatures for industrial processes. A single industrial application is sufficient to indicate the great economic importance of the subject. In the steel industry there are many processes of heat treatment in which fairly accurate temperature control is necessary. Formerly many millions of dollars of steel products depended upon the trained eye of the foreman in estimating the temperature of steel from its color. The accurate scientific measurement and control of temperatures in such processes is one of the major improvements which have been introduced into the steel industry in the last few years. There are many other branches of industry in which the need of accurate temperature measurement and control is of far-reaching economic importance.

Color Standards

There are several important branches of industry in which the way has not been blazed for scientific standardization. One important industrial subject in which very little progress had been made until the last few years is the question of standardization of color. At first we might be inclined to think that this would not be a subject of sufficient importance to warrant an extensive scientific and technical investigation. It is, however, a subject of real importance to a large number of industries which have no direct connection with each other, and a brief indication of the bureau's work in this subject may be of interest as typical of the type of work which can and should be done in other subjects. The bureau has been appealed to by the following interests for assistance in technical problems which the interests concerned were not in a position to solve without assistance:—Railway officials, refiners of oils, paint and varnish manufacturers, tobaccoists, manufacturers of chocolate, dairymen, physiologists, psychologists, illuminating engineers, dealers in dyes, lithographers, packing companies, teachers of art, paper manufacturers,

textile manufacturers, ophthalmologists, state governments, and the following departments and bureaus of the national government: Bureau of Chemistry, Navy Department, War Department, Government Printing Office, Post Office Department, Bureau of Engraving and Printing, Bureau of the Census, Bureau of Entomology, Bureau of Lighthouses, and the Interstate Commerce Commission.

The following are some of the difficulties which were to be met: The fundamental physical principles upon which scientific systematization and standardization could be built up were well understood only by a very few experts who had given attention to the subject; there was no agreement as to definitions, nomenclature, and methods, even among these experts; those most vitally interested from an industrial or commercial point of view failed to comprehend at all the fundamental principles involved; pseudo-standards, empirical methods having no definition or even description other than the maker's name were in wide use, and without any attempt at systematic standardization; there was a lack of reliable quantitative fundamental data on the physical, physiological, and psychological factors involved; precision instruments suitable for the measurements were not available. By the aid of a small congressional appropriation, and with the coöperation of a few technical laboratories, most encouraging progress has been made in the removal of some of these difficulties. But much remains to be done.

In addition to the work which has been accomplished in the fundamentals of the subject, progress has been made in applications to several important industries, for example, in the specifications of the yellow tints in butter and oleomargarin, in the absorption of glasses intended to protect the eyes from harmful radiation, which was undertaken at the request of the American Medical Association, in the measurements of transparency of paper and tracing cloth, and in the color grading of cotton-seed oil, which is commercially sold according to its color.

This work may be taken as a typical example of the important technical and economic results to be obtained from a sound program of standardization. It furnishes a broad scientific basis enabling an entire industry, including both consumers and producers, to speak the same language. The advantages accruing

to a single branch of industry may, normally, be expected to be many times greater than the cost of the fundamental work which will eventually find application in scores of industries.

GENERAL STANDARDIZATION AND TESTING

The bureau does a large amount of general standardization, research and testing work which is of a decidedly less fundamental character than that which has just been described, although it is of great, and often of more immediate importance to the industries concerned. One of the important lines of work is the testing of reference standards for other standardizing laboratories, both public and private. Many manufacturers periodically send their reference standards to the bureau for test.

Relation to the Government

The bureau serves as a testing laboratory for the various government departments. Many of them are engaged in the design, construction and specification of a great variety of special apparatus in which the principles of physics and chemistry are involved. The bureau is constantly called upon to serve as a consulting and research institution for these departments.

TECHNICAL ASSISTANCE TO REGULATORY BODIES

The bureau is not charged with the administration of regulatory laws of any sort. It does, however, coöperate closely with state and local regulatory bodies in technical matters, serving as an agent in technical investigations and to a less extent in an advisory capacity. The coöperation is, however, by no means limited to the official bodies. Opportunity is offered for the fullest coöperation with the industries concerned; the purpose is to be helpful alike to the official bodies, to the industry, and to the general public. During the early part of its existence this work was limited to coöperation with weights and measures officials. Gradually such coöperative work was extended. During the last few years the problems of safety in electrical installation and of service standards in public utility work were taken up actively. Certain phases of this work have grown rapidly and have had a very important influence in securing improvements and uniformity in such standards.

Weights and Measures

The bureau coöperates actively with state and local authorities charged with the administration of weights and measures laws. Under its auspices an annual conference of such officials is held. In this manner much has been accomplished in securing improvement in and uniformity of weights and measures legislation and in the improvement of the administration of existing laws and regulations. This is a subject of great economic importance. Men who are thoroughly familiar with the subject estimate that the direct loss to the general public through the use of fraudulent weights and measures amounts to tens of millions of dollars annually. Probably the indirect loss to the industry and to the general public arising from such unsatisfactory conditions as exist is equally great.

A few years ago the bureau took up the testing of railroad track scales. Until this time no official tests of such scales had been made, although the total annual freight revenue based upon weighings made with such scales amounted to over two billions of dollars. More recently the bureau was called upon to test mine scales in a case of a threatened strike. Very serious errors were found in all the scales examined in the region in question, not a single one being within the tolerance allowable in such work. All the errors were found to be against the miners. As a result of the investigation, indictments were returned in the local courts and several convictions followed. The result was that the threatened strike was averted. By the aid of a small Congressional appropriation, investigations are being made in other regions. As is well known, the question of accuracy of mine scales is a prolific source of labor disputes in the coal mining industry. It is thus seen that this work offers opportunities of a very great national service in helping to eliminate an important source of labor disputes, to say nothing of the extensive economic savings made possible thereby.

Safety Standards

As a result of coöperation with organizations seeking to introduce greater uniformity and efficiency in rules providing against hazards to persons in the electrical industry, the bureau undertook the preparation of a national electrical safety code. The prepara-

tion of this code extended over four years and involved by far the most comprehensive investigation of the entire subject that has ever been attempted. It has now been adopted in one form or another, in part or in whole, by some twenty administrative bodies, and many others have taken favorable action upon it, thus leading toward uniformity in the various states. A new edition of the code is now in course of preparation. The project is necessarily a continuing one to keep abreast of changing conditions in the industry.

A gas safety code has been in preparation for some time but its development was very seriously retarded by war conditions. The bureau is preparing to undertake the preparation of a series of industrial safety codes. This will be done in very close coöperation with a considerable number of organizations which are directly concerned. The importance of thoroughgoing investigation of this whole subject looking to the development of satisfactory codes which may be adopted with reasonable uniformity throughout the country, is evidenced by the large number of industrial casualties. The number of such casualties occurring annually is roughly equal to our casualties during the war. There are annually four hundred thousand accidents sufficiently serious to be recognized by compensation boards, and of these accidents eighteen thousand are fatal.

Public Utility Service Standards

The bureau is in active coöperation with state commissions, municipalities and public utilities in the study of technical problems forming the basis of service standards. The work includes scientific and engineering research, study of the methods of testing and inspection employed by utilities, municipalities and commissions, and the preparation of specifications regarding the quality of public utility service. Service standards for gas and for electric light and power, published by the bureau, have received wide recognition and have been very effective in introducing uniformity into the different states and municipalities. In one important phase of street railway work, namely the electrolysis of underground structures, the most extensive investigation ever made of the subject has been carried out during the last few years and the bureau publications on the subject are now recognized as the standard authority on the subject. Investigations are being

carried on in these and allied subjects, the most important of which is the scientific and technical basis for telephone service standards.

EFFECT OF THE WAR ON THE BUREAU'S WORK

The demand for the services of the bureau in connection with military work was far greater than its facilities could supply, although special grants for military purposes were made by Congress, by the President, and by the War and Navy Departments, totaling more than \$2,000,000. The bureau undertook work on some two hundred problems having a direct, military bearing and it is safe to say that probably more than four-fifths of the work of the bureau was directly for the Army and Navy Departments. The staff was more than doubled.

Only a few of the more important undertakings can be mentioned. The largest single problem was the testing of master gages for practically the entire munitions production. By master gages is meant the reference gages used by manufacturers and inspectors. Over one hundred persons were employed in the work. Some idea of its economic importance may be gained from the statement, which had been made on reliable authority, that at least two American firms, who contracted for large quantities of munitions in the early part of the European war, each lost several millions of dollars by rejections, the primary reason being inaccuracy of gages. The accuracy required in this work was decidedly greater than that ordinarily met with in machine-shop practice. This work has an intimate bearing on many industrial problems in normal times. For example, the bureau is taking an active part in the work of the American Screw-thread Commission (the chairman of which is the director of the bureau). General standardization of gages will probably play a more important rôle in the future than it has in the past on account of industrial standardization.

Another extremely important undertaking was the bureau's contribution to the aircraft program. A laboratory was constructed for the test of airplane motors under conditions of temperature and pressure met by airplanes at high altitudes. A wind tunnel was constructed for determining experimentally the wind resistance of various airplane parts. Extensive investiga-

tions were made on problems in connection with aviation instruments. The work of the bureau on airplane fabrics led to the introduction of an entirely satisfactory cotton substitute for linen when supplies of the latter were found to be inadequate. The ignition systems of airplane motors, technical questions having to do with the dopes used in treating airplane fabrics, gases for filling military balloons, and other aircraft problems led to extensive researches.

There were many other important investigations undertaken for the military departments which will have a permanent effect upon the industries. One of these was the development of a new kind of pot used in the production of optical glass, which is an industry new to America, and in the establishment of which the bureau played an important part. Another was the assistance rendered the War Department in simplifying and standardizing materials for purchases.

National research councils have been established in all of the Allied nations, and provision is being made in all these countries, particularly in England and the British Dominions, for the governmental promotion of research and standardization on an extensive scale.

Analogy between the work of the bureau and that of the Agricultural Department has frequently been drawn, it being held that the bureau should eventually occupy somewhat the same position with respect to the technical manufacturing industries that the Department of Agriculture does to the agricultural industry. Physical and chemical research and scientific and technical standardization are playing a more and more important rôle in the manufacturing industries. Consequently it seems inevitable that the federal government should, in this way, do more and more to foster these industries.

Industrial Standardization

By C. A. ADAMS

Bureau of Standards, Washington, D. C. or Harvard University

MOST of us talk of standardization in a vague way, usually having in mind some particular corner of the subject, but without full realization of the comprehensiveness of the word, of the magnitude and importance of the field covered, or that the coöperation without which our modern society would be impossible would in turn be impossible without a large measure of standardization. It might almost be said that the degree of standardization in any nation is a measure of its civilization, certainly in the material sense of the word.

Even in the tribe a common language was necessary, namely a standardization of the meaning of words. A dictionary is merely a recorded standardization of the spelling, pronunciation and meanings of words, as determined by usage and common consent. Without the stabilizing influence of such records any language would be in a state of confusing and undesirable flux. To be sure we still have dialects and colloquialisms, but these are gradually decreasing. In civilized intercourse the accurate use of words is absolutely essential to mutual understanding, however rare it may be. Between nations we still have many different languages although most of the civilized world now uses substantially the same alphabet and there is a persistent effort to establish a universal language.

The next steps in standardization were in coinage, weights and measures. Our present Bureau of Standards is the outgrowth of the old Bureau of Weights and Measures, which was merely the repository for standards of weights and measures. Imagine the hopeless confusion in this country if each state had its own system of coinage and of weights and measures. Even between nations differences in languages, coinage, weights and measures, constitute barriers to intercourse, social and commercial, which tend to prevent interchange of ideas and commodities and thus to retard that mutual understanding which makes for peace.

But standardization has already extended far beyond these

fundamental fields and is now growing with leaps and bounds. A brief classification and review of each field may be of interest, excluding the alphabet and coinage as outside of the engineering and industrial group.

CLASSIFICATION OF STANDARDS

Language. Definitions of scientific and technical words, terms, phrases: Abbreviations, symbols and diagrams. Standardization of these elements of our technical language is just as fundamental to intelligent intercourse in this field as in the case of ordinary intercourse; in fact it is more fundamental since we are here dealing mostly with accurately measurable quantities.

Standards of Quantity. Length, area, volume, mass, weight, density, pressure, heat, light, electricity, magnetism, radioactivity—physical constants and their relation to each other.

Standards of Quality. Specifications for materials together with standard methods for testing their qualities.

Standards of Performance. Operating characteristics of machines and devices: Output, rating, speed, efficiency, durability, etc., as specified in terms susceptible to measurement.

Standards of Practice. Regulations or codes dealing with construction, installation and operation, based upon considerations of safety, quality, economy, convenience, etc.

Standards of Type. Standardization of definite types or varieties to the end of reducing the number of types and the cost of production.

Dimentional Standards. In any product the standardization of sizes or sets of dimensions in order to reduce the number of sizes and the cost of production.

NEED AND VALUE OF STANDARDIZATION

This would hardly seem to need argument, but a few illustrations may not be out of place.

Some years ago a friend purchased an automobile which had nearly as many sizes and types of bolts as there were bolts on the car, with a resulting inconvenience almost unbearable. Since that time the Society of Automobile (now Automotive) Engineers has carried on a tremendous campaign of standardization which has not only vastly reduced the annoyance of repair work to the

purchaser but has greatly reduced the cost of automobiles. It is also largely responsible for the primacy of this country in that field.

Another illustration from the same field was when the same society started to standardize steel tubing. All the manufacturers agreed except one who persisted in his odd sizes. Shortly thereafter this manufacturer, wishing to purchase some steel tubing, asked for prices and shipment. He found that the price would be about 30 per cent higher than for the standard sizes, and that the shipment would be made in three months as against immediate shipment of the standard sizes from stock.

An illustration from the electrical field has to do with the rating of electrical machinery. In the early days there was no agreement as to what was meant by a ten horsepower motor, and fair competition was impossible. The ratings of the several manufacturers varied as much as 30 per cent and the customer was at the mercy of the persuasive talents of the salesman. It took the Standards Committee of the American Institute of Electrical Engineers five years to develop a system of rating satisfactory to all concerned and capable of reasonably accurate checking by commercial tests. The results of this work have proved to be of world-wide value.

In certain fields, notably in standardization of types and in the dimensional standardization when the latter is carried into complete designs, there is an obvious danger that standardization may develop into crystallization and serve as a brake on progress; but this is merely a danger and not an obstacle, since it is obviously possible to keep the standards abreast of progress. Moreover standardization of national scope rarely extends beyond those fundamentals in which changes are not likely to be desired, although the difficulty of making a change is the greater. A notable example of this is our abominable English system of weights and measures which just "happened" in those early days when the importance of a national system was not appreciated.

INDUSTRIAL STANDARDIZATION IN THE UNITED STATES

Up to within a comparatively few years the work of industrial standardization in this country has been largely of sporadic nature, without any appropriate or authoritative organization for

its conduct. One of the best typical illustrations is that of machine screw thread standards, one of the most fundamental and important matters in the whole field of industrial standardization.

Screw Threads, Bolts, Nuts, etc. In 1864 a committee of the Franklin Institute recommended the adoption of a system devised by William Sellers, now known as United States Standard. In 1884 Charles Bouer of Warder, Bushnell & Glessner, Springfield, Ohio, adopted standard sizes of screw threads for bolts and taps, based upon the United States Standard screw thread. In 1895 the American, Hartford and Worcester Machine Companies issued standards for set-screws and cap-screws, also based upon the United States Standard screw thread. In 1906 the Association of Licensed Automobile Manufacturers adopted standards for automobile screws and nuts.

In 1907 the American Society of Mechanical Engineers accepted the report of its committee on standard proportions for machine screws. This committee was appointed in 1902, and had devoted five years to the task. As far as the screw threads themselves are concerned, the American Society of Mechanical Engineers standard differs only in very minor details from the Sellers' or United States Standard, but the report of the American Society of Mechanical Engineers gives standards also for taps, special screws, special taps, and screw heads of various types, together with tolerances.

In 1912, the Society of Automobile Engineers was organized and has adopted fine screw thread standards, as well as many other size standards of automobile materials and parts.

In the fall of 1918 a screw thread commission was appointed by act of Congress and is still at work. In this work some consideration is being had of the international situation, and, although there are obviously great difficulties in adapting our threads in those of the metric system nations, the differences between the United States and the British threads are slight.

Wire and Sheet Metal Gauges. Another illustration is in connection with gauges for wires, drills, and sheet metal. Of these there are several varieties still in use, although for copper wires, the Brown & Sharpe or American wire gauge is most commonly used for the smaller sizes, and the Edison or circular mil gauge for all sizes above 0000 B. and S. All these gauges were originally

adopted by some individual such as the twist drill gauge of the Morse Twist Drill & Machine Company, the Stubbs steel wire gauge, etc.

An act of Congress in 1893 established the Standard gauge for sheet iron and steel. Previous to this time there were many gauges in use, and the addition of this one seemed only to add to the confusion. In 1895 a joint Committee of the American Society of Mechanical Engineers and the American Railway Master Mechanics Association agreed to recommend the use of the decimal gauge,—that is a gauge whose number is the thickness in thousandths of an inch,—and to recommend the abandonment and disuse of the various other gauges then in use. In 1904 the Westinghouse Electric and Manufacturing Company abandoned the use of gauge numbers referring to wire, sheet metal, etc. There are now at least eight different sheet metal gauges in use in this country.

Apart from the standardization by individual manufacturers in the haphazard method illustrated above and still in operation to a considerable extent, standardization in this country is largely in the hands of a comparatively small number of our national societies, and the United States Bureau of Standards. The standardization work of these societies is briefly outlined below.

American Society of Mechanical Engineers. Until within the past few years the standardization work of the American Society of Mechanical Engineers was done by special committees which reported directly to the society. Now there is a central standardization committee with general supervision over the work of the special committees dealing with particular standards. The constitution of this society forbids the *adoption* of standards, but the effect is practically the same since the reports of the committees are accepted by the society and distributed as indicating approved practice.

Some of the subjects covered are as follows:

Thickness gauge for metals; machine screw threads; pipe threads and flanges; pipe unions; special threads for fixtures and fittings; locomotive and engine tests 1890; power test code 1915, being performances tests of power plant apparatus; boiler code in 1914, being standard specifications for the construction of steam boilers; standard tests and methods of testing materials.

In this last mentioned field the American Society of Mechanical

Engineers held sway from 1889 until 1898 when there was organized in Philadelphia the "American Section of the International Association for Testing Materials," which was incorporated in 1902 as the "American Society for Testing Materials."

American Society for Testing Materials. This society is highly and efficiently organized to cover the whole field of materials including: Structural timber; steel for all purposes including railway rolling stock, rails, structures, and castings of all kinds; standard magnetic tests of iron and steel; copper for electrical and other purposes; bronze; cement; fire proof materials; road materials; paint; coal; etc. There are thirty-eight standing committees with a total membership of about one thousand.

Society of Automotive Engineers. This is a very active society organized in 1912, which has accomplished wonders in the field of automobile manufacture. The work of its standards committee might be best characterized as dimensional since it deals largely with the standardization of sizes and parts. The aircraft work was undertaken in 1917 and aircraft standardization begun.

American Institute of Electrical Engineers. The standards Committee of the American Institute of Electrical Engineers was first appointed in 1898, to develop standards for electrical machinery and apparatus. The main committee comprises over thirty members, and the thirty odd subcommittees include many more. The ground covered includes:

Definitions; rating, performance and testing of all types of electrical machinery; wires and cables; switches, circuit-breakers and control apparatus; meters and instruments; telephone and telegraph; etc.

The work of this committee is accepted as authoritative in its field and has been followed to a considerable extent by similar bodies in European countries. After the illuminating engineers and radio engineers formed societies of their own with their own standards committees, their rules, somewhat abbreviated, have been printed as parts of the American Institute of Electrical Engineers rules, with a note as to their origin.

Electric Power Club. This organization includes about 90 per cent of the electrical manufacturing interests of this country. Its work in electrical standardization takes the American Institute of Electrical Engineers rules as a basis and extends them to cover many special cases. It also includes some dimen-

sional standards, name plate data and other details of interest to the manufacturer.

National Electric Light Association. The Electrical Apparatus Committee of the National Electric Light Association deals with such special standards as they find to be needed in the operating field, and not covered by the American Institute of Electrical Engineers or electric power club rules,—*e.g.*: Standardization of sizes, voltages and taps for transformers, terminal markings for transformers, uniform service rules for motors, etc.

Both the National Electric Light Association and the Electric Power Club are in close coöperation with the American Institute of Electrical Engineers in their work of standardization.

United States Bureau of Standards. The bureau was established in 1903 and although there had been previously a Bureau of Weights and Measures, it was merely a receptacle for the standards of length, weight, etc., and not an active bureau of standards. The work of the present bureau has expanded enormously since its inauguration, its total appropriation during 1918, including that for buildings, having been over \$3,000,000.00.

The ground covered is given in a separate article.¹

National Fire Protection Association. Amongst other fire protection codes this association is responsible for the national electric code which was first issued in 1897 with a revision every two years. This code does not conflict with but runs parallel to the national electric safety code of the Bureau of Standards which deals more specifically with safety to life.

Railway Standards. There are several associations in the United States, notably the Master Mechanics and Master Car Builders Association which prepare standards for railway construction.

Other Industrial Standards. Numerous other organizations of a less technical nature prepare standards in their particular fields.

MACHINERY OF STANDARDIZATION

As the need of standardization has grown, the work has been undertaken by existing organizations or by new organizations created for the purpose in special fields. But it often if not usually happens that a group of standards undertaken by one society

¹ See page 247.

is of great interest to several others. Thus the need for comprehensive coöperation has grown rapidly during the past few years.

The value of a standard depends upon its acceptability to all concerned with its use. No good results from the issue of a standard not thoroughly prepared and acceptable to all, as the resulting situation would be similar to that in which each community creates its own language.

A consideration of the above brief history of American industrial standardization will make clear the absence of any well developed machinery of coöperation between the numerous bodies interested in any group of standards, and of an authoritative body whose approval will be evidence that the standard in question has been thoroughly worked out and has the approval of all the interests concerned, for only then will the standard be of real value. To meet this need there has been recently created the American Engineering Standards Committee, whose organization and method of procedure is outlined below.

AMERICAN ENGINEERING STANDARDS COMMITTEE

The American Engineering Standards Committee was formed by joint action of five national engineering societies (American Society of Civil Engineers, American Institute of Mining Engineers, American Society of Mechanical Engineers, American Institute of Electrical Engineers and the American Society for Testing Materials), called the "founder societies," to meet a long felt need of some available and satisfactory machinery for the development of engineering and industrial standards, by the operation of which duplication would be avoided and coöperation between all interested organization and government departments secured; so that when a standard or group of standards is developed it will be acceptable to all concerned and will, therefore, be a real American standard. Moreover as international standardization develops, there is imperative need for an authoritative national body to deal with the corresponding foreign bodies. National engineering standards committees are already in operation in England, Canada, France and Holland, and others will undoubtedly be organized in the near future.

—The American Engineering Societies Committee now proposed for the development of standards is made up as follows:

(a) The committee proper or the "main committee" (with three representatives from each of the five "founder societies" and three government departments), whose functions are chiefly those of an organizing, coördinating and steering committee.

(b) "Sectional committees," one for each group of standards (with representatives from all organizations or government departments vitally interested in that particular group of standards), whose function is to prepare the standards in question under the direction of the most vitally interested organization known as the "sponsor body."

(c) The "sponsor society" or "body" may be one of the founder societies, a government department, or one of the "Co-operating Societies" of organizations.

(d) Under "cooperating societies" it is intended to include all organizations interested in the production of standards and willing to coöperate.

Procedure. (1) When the development of a particular group of standards is proposed, the main committee assigns the work to the appropriate organization as "sponsor," or, if the situation seems to indicate that more than one organization is equally interested, to these organizations as "joint sponsor."

(2) The sponsor then appoints the sectional committee subject to the approval of the main committee. The purpose of this approval is merely to assure the comprehensive representation of all the interests involved. Complete records of all interested organizations and of their standardization work and connection, will be kept on file and properly classified in the office of the main committee. The main committee or its secretary will thus be able, either promptly to suggest the proper representation to a sponsor on request, or to approve or amplify the representation as provisionally proposed by the sponsor.

(3) After a group of standards has been prepared and accepted by a sectional committee, it is submitted to the sponsor body for its approval and then to the main committee with a full report of its history. When approved by both the sponsor body and the main committee, the standards in question become American Standards.

(4) When the report of any sectional committee is being considered by the main committee, three members of that sectional

committee are invited to sit with the main committee to report, discuss and vote on the standards in question as if they were regular members of the committee. Thus each sectional committee (and therefore usually each sponsor body) will be represented on the main committee when standards in which they are interested are being discussed.

(5) The scrutiny of a standard by the main committee is to make sure that the proper procedure was pursued, that it was prepared by a comprehensively representative sectional committee, that the vote of acceptance was nearly enough unanimous, and that the standard is consistent with other related standards. Consideration is also given to international relations; but the main committee is not supposed to pass upon the details.

(6) After approval by the main committee the standard is published by the sponsor body with the statement that it has been approved by the American Engineering Societies Committee, and labelled "American Standard" with the appropriate descriptive title.

Briefly summarized this procedure is as follows: Standard assigned by main committee to sponsor body. Sponsor body appoints a thoroughly representative sectional committee, subject to approval of main committee. Sectional committee prepares standard and submits to sponsor body which then submits the standard with its approval to the main committee. The standard is then published by the sponsor body and labelled "American Standard."

It is hoped that this movement will receive the hearty coöperation of all organizations interested in standards. If so it certainly will contribute largely to the industrial development of the country. Similar committees are already in operation in England, Canada, France and Holland. With all of these the American Committee is in coöperative touch.

International standardization has already been carried on effectively in the electrical field through the International Electrotechnical Commission, and there is every reason to expect that it will spread rapidly under the influence of the American Engineering Standards Committee to the great advantage of our foreign commerce. In the broad sense, international standardization means a common industrial language and the removal of one of

those barriers which tend to separate nations and to give rise to misunderstandings. The more of these barriers we can remove and the more we come to realize that our interests are after all in common, the more likely we are to attain that lasting peace for which the world longs.

Lessons of War Cost Finding

By WILLIAM B. COLVER

Chairman, Federal Trade Commission

DURING the nineteen months—April 1917, to November 1918—during which the United States was a belligerent in the World War, American industry and finance passed through an ordeal that brought both strength and weakness into sharp relief. Before this nation could strike its full stride, things were reduced to rather elemental and primitive terms. Much of mystery and of pretense was swept away. Out of it all must come to those in varied pursuits and walks of life, a charity and understanding, one with the other, based on fuller knowledge.

During these nineteen months the Federal Trade Commission had a peculiar opportunity to sense what was going on, especially in the industrial world. It has been the cost-finding agency of the government; the expert accountant of the War Industries Board and its Price Fixing Committee, to the Army, the Navy, the Food Administration, the Fuel Administration, the Railroad Administration, the Shipping Board, the Post Office and other agencies.

It is to be remembered that cost finding and price fixing were two entirely different functions. One was a striving for exact fact through painstaking study and labor; the other, building on this fact foundation, was a matter of discretion, of judgment, of accommodation to seen and unseen forces and an effort to distribute equitably the hardships inevitably resulting from the dislocations of war.

In its cost-finding work the Federal Trade Commission of necessity had to search into the very vitals of industry. Some took this as a matter of course, appreciating at once the end in view. For some other industries, however, such intrusion into the privacy of business was met at first with reluctance and misgivings. For the latter this attitude quickly changed, however, and these industries also welcomed and aided the commission in its work. At the end it can be said that there remains no sus-

picion that a single business secret has been betrayed. Costs were secured from whole industries—sometimes involving in a single inquiry the examination of the books of thousands of companies. These results were brought together and presented without disclosing the identity of individual figures except to the responsible officers of the government, and after opportunity for scrutiny by each concern of the processes and results as to its individual case.

Thus came confidence and understanding where impersonal discharge of duty was met with candor. The vast majority of patriotic and enlightened men of affairs welcomed every effort to steady and stabilize industry as it gathered its vast powers to ride the red seas of war and to deliver the tremendous blow against the enemy.

Before this country entered the war, and, therefore, before war powers could be exercised in control, a huge and false price structure was built up, and in spite of all that could be done, became more aggravated. Cost of living and wages went upward as prices rocketed. Price structure and its attendant inflations today are among the chief perils of the reconstruction period. That they are no greater can be attributed almost wholly to the cooperation of industry in the program of price fixing which checked, so far as possible, mounting prices, and, for the time, negated price based solely on supply and demand.

One great handicap lay in the fact that basic natural resources had been appreciated in value before the price-fixing function came into operation. European belligerents had for three years been bidding, frantically, for the treasures that nature had placed under our stewardship, and as a result our raw materials had been hugely written up before the United States entered the war. So when price fixing was undertaken it started from inflated values for undug ores and coal, untouched petroleum and uncut forests. Despite this false start and the difficulties that flowed therefrom, cumulating in all subsequent industrial operations, price fixing did stabilize industry and insured it against ruinous collapse at the end of the war.

It is estimated that, in its work for various government agencies, the Federal Trade Commission obtained cost and production figures of upwards of 10,000 companies, in scores of important

industries and many minor ones, which had an approximate aggregate investment of twenty billion dollars, and the commodities directly affected by such cost findings represented annual sale values of at least thirty billions of dollars,—not far from twice the amount of the first, second and fourth liberty loans taken together. These cost studies by the Commission demonstrated frequent and great deficiencies in the accounting methods employed by mining and manufacturing concerns and especially in cost-accounting methods. In some of the oldest and greatest industries there was not even an attempt at that determination of unit costs and profits by products which is essential, generally, to the safe conduct of industry. It is evident that where such cost accounting is not established it should be introduced and where it is defective it should be reformed. Inventories should be carefully kept; labor and material should be accounted for as used; indirect and overhead charges should be fairly allocated and proper allowance made for depletion and depreciation of resources and plants.

On the other hand, capital charges for construction should not be mingled with operating or production expense nor should there be introduced items of actual or imputed outgo such as income and profit taxes, depletion or appreciation of plant investments, or interest on capital owned. However, where complete records are kept, it is relatively easy to correct bad principles, reject improper items or introduce omitted ones. Inventories and records of expense and sales by products are necessary to compute profit and loss by products.

The business world, well aware of the extent to which defective cost-accounting methods prevail, is alert to promote reforms. A few years ago the Federal Trade Commission initiated an effort to be helpful in this direction and applied to Congress for funds to carry it on. As these were not given the movement lagged, but, as a result of the Commission's enforced studies and as a by-product of its war work, that effort may well be profitably and economically resumed. If the earlier effort of the commission could have gone forward before the war, the government would have been repaid many times over during the war through making it possible to ascertain costs much more expeditiously and cheaply.

In the immediate future the question of costs will be especially critical for the nation's business in arriving safely at post-war readjustments. The matter is important to the individual producer, to his banker and to the industry and the public at large.

The cost and profit findings of the Commission developed many facts of interest but were prepared under such pressure that there has been little time as yet to analyze or interpret the results. Two facts, however, which are generally known, may be mentioned. First, the average cost during the war period was much higher than before the war. Such increases were frequently as much as 100 per cent. Second, the variation in costs between different companies, often considerable in normal times, was enormously exaggerated under war conditions.

The great increase in average cost was due in part to increase in cost of the instruments of production and material and supplies; to increased cost of labor partly through increase in wages but more through violent and frequent shifting of labor and a consequent loss of the efficiency that springs from organization, habit of work and special skill; to wastes caused by effort for increased production and, of course, to the general depreciation of money in terms of goods or services. The cost of living continued to mount rapidly and with it wages and labor cost.

Fundamental to the cost increases, however, was the writing up of values of natural resources. This tended to bring about the production of raw materials from relatively barren or inaccessible sources with a consequent diversion of labor, capital and transportation to uneconomic operations. It is doubtful whether high prices did really stimulate production to the degree that has generally been believed.

Where there were successive stages of production in an industry (sometimes integrated and sometimes independently operated) the costs were increased by the taking of high profits between the successive stages of production. High costs or high profits, or both, in one stage had a cumulative effect on costs in all succeeding states—a sort of pyramiding of cost. Price fixing, arriving too late to get at the source of the trouble in the short space of the war, was useful in checking its unlimited extension.

The abnormal variation in costs came largely from the bringing in of uneconomic supplies of raw materials and the writing up

in value of advantages by integrated concerns and those controlling natural resources. Congested transportation and dislocations of labor with the consequent irregularity of industrial operations also made for wide cost variations.

In considering such variations, however, it should be borne in mind that the lower cost company may not be more profitable than the higher cost producer even when both sell at the same price. Often the lower cost is the result not of greater economies or natural advantages but of investment in more stages of production or in more extensive mechanical equipment, and the larger unit profit resulting from the lower cost is absorbed in providing the proper return on the greater unit investment.

Not the least benefit of cost finding, incident to price fixing, was the bringing together, with government officers, of the representatives of the industries for full and frank discussion of costs, methods and products. This, with the assembling of such a body of current data as was never before had in this country, demonstrated the value of such meetings and of the preparation and exchange of such proper and useful information. It would seem that the Commission might well continue, at least as to certain industries, this assembling and distribution, currently, of basic and reliable information and that, well within the law, industry meeting with government officers might continue to exchange helpful experiences and information without the danger of being suspected of price fixing or other restraints of trade.

If certain laws, enacted to deal severely with admitted abuses, are fully observed in their spirit, in this manner, it would seem that the public interest would be fully served. In such case, a peace-time adaptation of the war-time meetings between individuals and government for frank discussion, would be as helpful as it would be innocent of wrong intent or harmful effect. Such open conferences might be expected to serve all the good and necessary ends which are among those sometimes sought by clandestine meetings. Pursued in the generous American business spirit of fair play such conferences might be extremely useful by ascertaining the facts and clearing away doubts and suspicions.

From the experience of cost finding, we believe we may argue for:

- (1) Standardized accounting systems, suited to the various industries.
- (2) Cost and profit accounting for individual products.
- (3) Reasonable standardization of products and elimination of excessive costs due to unnecessary multiplication of styles and types.
- (4) Compilation and issue of current, basic trade information.
- (5) Conferences between industries and government for the exchange of proper and useful views and information.

As for the outlook there need be foresight but no fear. A period of readjustment must be met with the new and broader view. The same coöperation of industry, of labor, of capital and of government that armed the nation for war will make it still greater in peace.

As a nation we organized lines of supply and communication from Chile and Australia and Alaska and from every state and every farm and factory, and through these lines across oceans and continents to the battle front of France. As a nation we arrived at a power to dispatch a ship loaded with men and food and supplies, on the average, of every ten minutes night and day, Sundays and holidays. As a nation we launched ships at the rate of 490,000 gross tons a month—about 700 tons every hour, on the average. As a nation we armed and sent across the sea our young men, true crusaders of democracy, at the rate of 10,000 a day. As a nation we threw upon liberty's altar billions and billions in loans—about \$500 at every tick of the clock, day and night, Sundays and holidays.

Such a nation, as a nation, may turn with confidence to the solution of whatever problems of industry or finance which the future may hold in store.

After-War Readjustment: Rectifying the Price Situation

By HON. A. C. MILLER

Member Federal Reserve Board, Washington, D. C.

NOW that the war has been fought and won, "what next" is the question everybody is asking and for lack of some other sounding word or phrase, nearly everybody is answering "reconstruction." It is our national habit when we have to move on from one position to another to help ourselves along with a word or a phrase; so it was during the war, when we heard much of "unification," "coördination," and "conservation." Now that we have left the war behind and are looking forward to after-war problems, we hear much of "reconstruction." We have borrowed the word from Europe where the war has left conditions very different from those obtaining here. It is just as well that we should recognize the differences. The war has left us with some difficult financial and economic problems but it has not left us with any such problems of reconstruction as it has Europe, unless we are going to embark upon the venture of trying to "make the world over." It will help much, I believe, to put us in the right frame of mind toward our after-war problems if we substitute for the word "reconstruction" the less ambitious but nevertheless suggestive phrase used by the President the other day in his address to Congress, of "economic and industrial readjustment."

EUROPE'S PROBLEM, RECONSTRUCTION: AMERICA'S, READJUSTMENT

Contrast for a moment our situation with that of the European belligerents which have had four years of war. Sixty millions of men at one time or another have been drawn to the front. Two or three times that number have been drawn into work so closely related to operations on the front that they were virtually in the line of battle, so far as the normal processes of economic and industrial life were concerned. Ten millions have been killed, fifteen or more millions are left so maimed and diseased that they will be of doubtful industrial value, unless or until they are

"reconstructed." These killed and maimed and diseased represented much of the flower of the industrial population of Europe. They represent a heavy and grievous loss to their countries' industries. Their loss must somehow or other be made good through finding and training others to take their places. Until this is accomplished, the industries which depended upon their skill will limp. Here is a problem of reconstruction.

The lands in many of the choicest and most fertile districts of Europe were laid waste by the war; farmsteads were burned, tools and live-stock are gone; the very soil itself is destroyed. Here is work of veritable reconstruction. Factories, mills and foundries in France's busiest workshop district have been destroyed or so badly injured or dismantled that much must be done before they can again take their place in the industry of the world. Here again is reconstruction. It is clear, also, that much work must be done, not only in the fought-over and devastated districts of Europe to repair the work of ravage and destruction, but also even in those where the sound of a gun was never heard. There has everywhere in Europe been such deterioration of industrial equipment through enforced neglect of upkeep that much must be done before factories and mills are brought back into good working order and are able to turn out products which can be used by their own people or sent into the markets of the world in payment of needed supplies and materials. This also means reconstruction.

No such fundamental economic and physical problems as these are left to us as a heritage of war. Our situation has been one of comparative immunity and safety. Our losses of life have fortunately been few and our losses of property negligible. The main cost of the war to us, apart from the pecuniary cost which is reckoned in the amount of our national war debt and taxes, is to be found in the disorganization of industry through the necessary shift from a peace basis to a war basis. It has been estimated that, including the men who went into the armed service, some eighteen million persons have been involved in war work of one kind or another, mainly in industries producing for the support of our armies and the supply of our European associates. Some of these and in some cases many will have to be shifted from their present employments.

Places will also have to be found for the returning soldiers.

But it would be a mistake to exaggerate the extent of the redistribution of the labor force of the country that will be thus occasioned. It must not be overlooked that many of the basic industries, such as steel, copper and the metal trades generally, which were speeded up or enlarged for the purposes of war production, are normally very large industries and it is altogether probable that they will remain permanently enlarged to meet the heavy after-war demands for their products and that consequently many of those who first found employment in these industries, as a result of the war, will remain with them. At the most, taking the situation by and large, our after-war condition will present a problem of reëmployment, or reorganization, rather than a problem of reconstruction. It is a problem that we may well believe will find its own solution in due course—indeed is already finding its solution—if the process of economic and industrial readjustment is kept measurably free from unnecessary interference on the part of the government, and if good temper, forbearance, and a spirit of accommodation are shown by all interests during the period of transition. Government help there may have to be in stabilizing industrial conditions from time to time through employment on public works, but the intervention of the government should be by way of supplement to, rather than substitute for, normal business agencies. The problem is mainly a business problem to be handled by business men.

EUROPE'S ECONOMIC AND FINANCIAL NEED

It is even likely that in Europe the process of reconstruction and recuperation will be speedier and more complete than many now imagine. The parts of Europe that have borne the brunt of the war are those whose people are possessed of the greatest economic capacity—energy, ambition, inventiveness and determination. They are impatient to wipe out the traces of war and get themselves back into working order. Much assistance will be needed by them from the outside world in the first steps of the process and that means chiefly from us. But with that assistance, the repair of waste and the accumulation of new capital may be expected to go forward rapidly in Europe in the next few years. Indeed the rapidity of Europe's industrial recovery is likely to be one of the economic marvels of all time.

Europe will need goods and credit from us if she can get them on a reasonable basis. The goods she will need are mainly food-stuffs, raw materials of industry and the basic materials of construction. Provided she can get these at reasonable prices, she will take them in large amounts, and trade and industry may be expected to be active in the United States for a few years and our problem of economic and industrial readjustment may be expected to find much of its solution in this way.

The credits Europe will need will be both short-term or commercial and long-term or investment. The former we can easily provide through the further development of acceptance credits and the aid of the federal reserve banks. Long-term or investment credits present a different problem; they call for capital, and capital must first be accumulated or saved before it can be loaned or invested. It may confidently be expected, however, that if Europe finds in the American market the goods it needs at reasonable prices, ways will be found of financing the purchases and investments with the aid of our bankers and the investing public. The main pivot of the after-war economic situation, particularly in its international aspects, is prices. Europe cannot afford to buy much from us on the basis of present war prices without endangering her economic solvency and it may well be doubted whether it will be to our permanent interest, if we undertake to finance her reconstruction, to encourage her to buy much at war prices if her solvency is thereby threatened. Much will, therefore, depend, both for us and Europe, on the course that prices take during the coming months and years as to whether the period of transition, readjustment or reconstruction, whichever it may be, is to be a short and satisfactory one or a long and wearing one.

THE PRICE SITUATION

Of all the financial difficulties confronting the country at the close of the war the price situation is, in a business way, the most serious and the one calling for the most immediate correction. Fortunately for the United States, this situation is not confined to us. The whole commercial world has been involved in a series of extraordinary price disturbances growing out of the war. While the situation is worse in some countries than in others, it

is serious in all. The general dimensions and the gravity of it are sufficiently disclosed in the broad statement that, in the course of the four years of war, the world level of prices has risen by one hundred per cent. In some countries prices mean depreciated paper prices, in others gold prices, but in all an increase has been experienced that makes the problem of price rectification one of urgency everywhere. -

It cannot be emphasized too insistently that economic life can never be normal and that business conditions can never be safe until prices in leading world markets work their way back to some sort of a stable or normal level adjusted to conditions of national and international demand and supply, as these will be when industry and trade among the nations have recovered from the shattering effects of the war and have resumed something that can be called a normal course. How quickly this process will be worked out will determine how long the world will be in the uncertainties and difficulties of a period of transition. Periods of transition are always periods of strain. To shorten them by such means as can be foreseen to have a desirable effect is the part of good economic and financial policy, both for the individual business man and for the nation and for the commercial world at large.

There is already much welcome indication that the more foresighted of the American business communities are looking ahead to the falling of prices as something that is inevitable in the normal course and, instead of waiting, are anticipating and assisting the process of readjustment by voluntary price reductions. Such was the action recently taken by the steel trade, the greatest of the country's barometers of industry, an action that is bound to have a decisive effect in many related fields. Many merchandising establishments, also, are looking ahead and taking such precautionary measures as they can to prevent being involved in avoidable loss in the transitional period of price readjustment. Bankers are scrutinizing credit statements and are advising clients to be careful not to be caught with large inventories on a falling market, and the advice meets many prepared minds and much ready acceptance.

Such mental preparation paves the way and thereby hastens and makes safe the process of price readjustment. But when all

is done in this way that can reasonably be expected of the business man, it will still remain true that much of the readjustment of prices must come about through other action in which the community at large must have a principal part.

What is it that has driven prices to the dizzy heights that have prevailed during the past four years? In general, the answer of course must be war—the economic and financial disturbances the war has produced. It is difficult enough, even under normal conditions, to specify the factors which determine the level of prices. The price situation, as we find it in any given country at any given time, is the result of a complex of forces in which the production and costs of goods, market demands, the saving and investment of capital, the state of credit, and the volume of money and currency, all have their measure of influence. These have all been at work during the war, but they have been so complicated in their action by the war that no simple explanation of the movement of prices in our own or other countries is adequate fully to explain the causes of what has been taking place.

HIGH PRICES: SCARCITY AND INFLATION

From the very beginning, the war caused a great intensification of the demand for a great variety of materials and supplies needed in modern warfare. With all the efforts that have been made to adjust the productive organization of the different countries to the supply of these much-needed things, there has, until quite recently, been a relative shortage of many of the primary materials and basic commodities of war. To that extent, they have commanded "scarcity values" and their prices would have ruled high even had there been no alteration in general monetary conditions. Much patient and methodical statistical investigation will be needed to determine the exact extent to which high prices during the past four years can properly be regarded as "scarcity values."

To the extent that the prevailing high prices have been "scarcity values" we may expect the situation to right itself in due time as industry shifts from war production to peace production and the vast numbers of able-bodied workers, who have been withdrawn from productive industry to military service, are reinstated in the industrial army. The production of many basic materials and commodities, which have been in short supply, will gradually

catch up with the demand, and values be brought back more nearly to normal. This movement has already begun.

Looked at from this point of view, the problem of reestablishing a normal price level is a problem in *production*, one to be worked out in factory, farm and workshop. Prices will move toward normal, and goods will become cheaper as they become more abundant. They will become more abundant as the wasteful processes of war consumption come to an end and production resumes its normal ways.

But "scarcity" is a relative term and there is so much evidence of an artificial abundance of money in comparison with the things that are purchasable by it that the abundance of money must be credited with at least an equal influence in explaining the high prices which have prevailed. Special attention will, therefore, have to be directed in the process of a return to a normal basis of prices to the condition of banking credit and currency, which has promoted or sustained the upward flight of prices.

The balance sheet of the belligerent world has been swollen by the addition of about two hundred billions of public debt on the liabilities side of the account with only partial offsets in the way of newly created wealth on the assets side of the statement to insure economic solvency among the European belligerents and especially the Central Powers. Not the least of the wonders worked by the war has been the ease with which vast public debts have been contracted on what must be considered a relatively favorable basis so far as concerns interest rate and other terms.

The fact that the war was not merely or mainly a war of armies but a war of nations in which everybody had his part to play does much to explain the unprecedented financial achievement of all the belligerent nations. Patriotism may have run as high in other wars but never before did it so nearly embrace whole communities to the last individual in its magnificent sweep. It has become a matter of commonplace observation in the United States that our people of many different races, creeds and conditions have never before been so nearly one in thought, feeling, spirit, purpose and action, as during the war. All of the four great liberty loans have given the evidence and measure of the people's devotion to the nation's cause. Twenty-one million subscribers to the fourth liberty loan tells much of the story of

our financial achievement—much, but not quite all. For the achievement is not quite all that it appears to be and must become. The rest of the story will be found in the expanded condition of the banks.

Of the eighteen and a half billions of loans thus far put out by the government, it may be estimated that six billions are being carried by or in the banks. To the extent that subscriptions to government borrowings are paid, not out of cash which the subscriber has actually saved out of his income, but by credit borrowed from his bank, the payment of the subscription must be regarded as having given rise to an expansion of bank credit to approximately an identical amount. Such expansion of credit, unless it sets in motion new forces of saving, results in inflation, first of credit, then of currency, and, as a consequence of both, inflation of prices. A bank's deposits and currency are the children of its loans and investments. When the loans and investments, therefore, which occasion an increase of deposits and currency, are not definitely tied to the production or saving of goods, they must cause a rise of prices. When the rise of prices resulting from an expansion of credit and currency is not able, or until it is able, to induce a commensurate increase of productive industry to match the increased buying power of the community, the resulting condition is one of inflation, that is, one in which there is more purchasing power, in terms of money, afloat in the community than is called for.

This condition has not been peculiar to the United States. Credit expansion and currency expansion—inflation, for short—have everywhere played their part in the financing of the war, fortunately not so much in the United States as in other countries, but yet enough to cause concern; not disastrously as in former wars, but not without producing some serious consequences and leaving in some of the belligerent countries grave dangers and in all of them, ourselves included, a troublesome after-war situation. The great central note-issuing banks of the modern world—such are also our federal reserve banks—have made inflation easy. In the estimation of many they have also made it safe. They certainly have done much to make it technically safe. The theory upon which the great note-issuing banks pretty generally have proceeded is that the test of banking safety is to be found in the

reserve ratio. The more gold, the more credit and currency. Such appears to have been their monetary logic. Acting upon this theory, they have scoured their respective countries of most of the scattered gold.

“GOODS” VALUE VERSUS “GOLD” VALUE

So long, therefore, as the great central banks could gather in gold enough to maintain a suitable mixture of gold in their resources and thus clothe their liabilities with a suitable covering of gold, their position was one of technical safety, and appearances were good. It may be admitted that appearances count for much in the psychology of credit and banking. But more than appearances and more than technical safety and, therefore, more than gold, are necessary to the good functioning of reserve and note-issuing institutions. The character of their general assets as well as the adequacy of their reserves determines their real condition. There must be wisdom—great wisdom—and, at times, courage as well as wisdom in the administration of note-issuing and reserve credit banks if more than a condition of technical banking strength is to be maintained and the world made safe against the costly evils of inflation. That lesson the world is about to learn as a result of the experiences of the past four years. Until it is learned and the credit and currency situations in the leading countries rectified accordingly, the business of the world will be in a state of maladjustment with the industrial unrest and strife that are usually bred of maladjustment and financial confusion.

The fact that inflation in the United States has not been caused or attended by suspension of gold payments or a discount on paper currency, such as was experienced during the Civil War, should not blind us to the realities of the situation. Suspension of specie payments may take place without producing a state of inflation. (Such was the case in France during the Franco-German War of 1870-71, when the Bank of France suspended specie payments but managed its note issues with such care that they were never at any time over-issued and never went to anything more than a nominal discount as compared with gold.)

Recent events, particularly in the United States and among the northern neutrals of Europe,—which like the United States have

experienced enormous accessions to their supplies of gold during the period of the war,—show that inflation may take place without a suspension of specie payments or the occurrence of a discount on paper. It was the very abundance of gold that helped to advance prices in the United States before our entry into the war. The currency of the United States now, as then, is a gold currency. Prices in the United States are, therefore, gold prices. This fact is incontestable. There is gold enough and more than enough to assure the absolute convertibility of our paper currency in gold. The trouble with our situation is not that the paper dollar is not as good as the gold dollar; just the reverse is true: it is. The trouble with our situation is that neither the paper dollar nor the gold dollar will buy as much as they did before inflation of prices began. At prices as they are, the paper dollar buys as much as the gold dollar. The gold dollar is no better than the paper dollar. The two are interchangeable. Our trouble, therefore, is with dollars, irrespective of their kind. It is one of quantity, not of quality, or, at any rate, not of quality in terms of gold. Our elastic note issue system has enabled us to place the production of paper dollars on a "quantity basis" without endangering the integrity of their gold value. The trouble is with the goods value, not with the gold value of the American dollar. Our difficulty is,—and therein consists our inflation,—that dollars, good financial dollars, "safe" dollars, gold dollars, have been created in such abundance in comparison with the amount of goods purchasable by them that they have, as a necessary result, lost in their purchasing power—in other words, the supply of money has become disproportionate to the supply of goods with rising prices as the inevitable result.

Since the beginning of the European War, or between the dates of July 1, 1914 and September 1, 1918, the total money in circulation in the United States, as shown by the Treasury statement, increased from \$3,402,015,000 to \$5,621,311,000, an increase of \$2,219,296,000 or 65 per cent. Total deposits of all banks,¹ between the dates of June 30, 1914, and June 29, 1918, the latest date for which complete figures are available, increased from \$21,279,000,000 to \$32,589,000,000, an increase of \$11,310,000,000 or 53 per cent. Loans and discounts for the same dates show an

¹ National, state and private banks and loan and trust companies.

increase from \$15,340,000,000 to \$22,059,000,000, or \$6,719,000,000, an increase of 44 per cent. Total investments for the same dates show an increase from \$20,924,000,000 to \$31,982,000,000, or \$11,058,000,000, an increase of 53 per cent.

Since our entry into the war, or between the dates of July 1, 1917, and July 1, 1918, the total money in circulation in the United States, as shown by the Treasury statement, increased from \$4,850,360,000 to \$5,621,311,000, an increase of \$770,951,000 or 16 per cent. Total deposits of all banks,² between the dates of June 20, 1917, and June 29, 1918, the latest date for which complete figures are available, increased from \$30,443,000,000 to \$32,589,000,000, an increase of \$2,146,000,000 or 7 per cent. Loans and discounts for the same dates show an increase from \$20,502,000,000 to \$22,059,000,000 or \$1,557,000,000, an increase of 8 per cent. Total investments for the same dates show an increase from \$28,611,000,000 to \$31,982,000,000, or \$3,371,000,000, an increase of 12 per cent.

The index number of wholesale prices in the United States computed by the Bureau of Labor Statistics shows a rise from 98 in June, 1914, to 202 in August, 1918, a rise of over 100 per cent. The index number for retail prices for the same dates moved from 99 to 171, an increase of about 73 per cent. Since the entry of the United States into the war, the index number of wholesale prices has risen from 171 in April, 1917, to 202 in August, 1918, an increase of 18 per cent, the index number for retail prices for the same dates having moved from 145 to 171, an increase of 18 per cent.

These figures certainly reveal a very considerable increase in the volume of banking operations in the United States since the beginning of the European War in 1914. An aggregate of probably over ten billions (an increase of about 50 per cent) of new purchasing power since the beginning of the European War, mainly in the form of bank deposit-currency, has come into existence during this period. The portion of this increase, which is to be charged to the period beginning with our entry into the war, cannot be accurately determined for lack of adequate data. But an indication is supplied by the increase between the dates of June 20, 1917, and June 29, 1918, noted above, in the figures for total deposits and money in circulation, an increase of the two

² National, state and private banks and loan and trust companies.

together of 8 per cent. It seems within the probabilities that, of the ten billions of new purchasing power which there is good ground for believing have been created in the United States since July, 1914, a fourth may conservatively be regarded as chargeable to the period since our entry into the war.

To the extent that this increase in the supply of the purchasing media of the country has not been offset by a like increase in the production of goods, it must be regarded as unnecessary and superfluous from the economic point of view, whatever may be said in justification of it from the point of view of political and general financial expediency. To the extent that it has been offset by increased production, it presents no difficulty. That there has been an enormous increase in the physical output of goods in the United States during the past four years cannot be questioned. Never before has the country come so near to realizing its full productive capacity; never before has there been so little unemployment or idleness. Some estimates place the increase in the physical product of the country during the past four years as high as 25 per cent. If we take a more conservative figure, of 20 per cent, it would suggest the inference that a commensurate proportion of the volume of credit and currency existing in 1914, or some four billions of dollars in the aggregate, was probably legitimately called for by the growth of production in the past four years.

In estimating the amount of credit and currency contraction that will have to take place before our price situation can be regarded as in a fair way to become normal, these four billions should properly be deducted from the statement of the present volume of these items. It would appear probable, therefore, that some six billions of credit and currency in the aggregate have been created in the past four and one-half years that cannot be regarded as having been occasioned by the requirements of industrial growth, as measured in terms of physical units. This is also approximately the amount of war securities and war loan paper, as has already been stated, that the banking system of the United States is today carrying. To this extent the expansion of banking credit and currency would appear to have been occasioned by the banks having assumed the burden of assisting the placement of Treasury borrowings by the extension,

use and lending of their credit. Such use of credit is almost of necessity inflationary in its immediate effects and in its continuing tendencies until corrected.

RECTIFICATION OF THE PRICE SITUATION

There can be little question of what form the correction should take. Where there has been *inflation*, there must follow *deflation*, as a necessary condition to the restoration of economic health. Contraction of bank deposits and currency, through the liquidation of war loan accounts, is clearly indicated as the next and necessary step in the process of bringing the credit currency and price situation back to normal. Those who in our liberty loan campaigns were persuaded to borrow and buy must now be made to save and pay. "Save and pay up" should henceforth be our slogan. The problem of correcting a state of banking inflation is mainly a problem in saving. We must either put more goods behind the outstanding volume of credit and currency—that means production—or we must reduce the volume of credit and currency to suitable proportions—that means saving.

Expenses and spending must be kept down; money must be saved. As it is saved, it must be paid to the banks in liquidation of war loans and other non-productive borrowings. If the money saved is in the form of deposit or checking credits, then the total volume of these in existence and in use will be diminished as they are used to cancel an equivalent amount of loans and thus will the banking structure be contracted and prices be rectified. If in the form of bank notes, the cash holdings of the banks will be built up and they will be enabled to reduce their borrowings from their reserve banks and in this wise the notes will find their way back to the reserve banks, reducing at once the volume of their outstanding note liabilities on the one side and their holdings of bills discounted on the other. Thus will saving effect the reduction in the volume of outstanding currency and credit. There is no escape from this necessity. So long as inflation exists, the nation must continue to practice thrift. Only thus can the capital be created and supplied which will wipe out the inflation that already exists and avoid or minimize such new inflation as may threaten in connection with the great borrowings that must still be made for the use of our government and the governments associated

with it, to say nothing of the large demands for capital that will be made on the American investment market by Europe in the process of reestablishing her industries.

The government's requirements for the remainder of the fiscal year have been stated as likely to be not less than seven billions. This amount, added to the six billions of outstanding war securities which, it is estimated above, have not yet been permanently absorbed, gives us a total of thirteen billions of public securities which must be taken up out of genuine savings if our financial and credit system is to be sterilized of the taint of inflation which at present is upon it. When this is accomplished, prices are likely to be at something that can be regarded as a normal level. Until it is accomplished, there will be an unstable price situation. As it is gradually accomplished, prices will go back to a normal basis in an orderly manner. But if a considerable part of the new borrowings, which the government must make during the fiscal year and until war accounts are finally closed up, are financed by any considerable expansion of banking credit, we are likely to have more inflation and an aggravation of a price situation which is already sufficiently serious and burdensome.

REPLENISHING CAPITAL

Europe's post-war financial and industrial requirements cannot even be conjectured. But they are likely to be very considerable if, as has already been suggested, goods can be bought in the American market at reasonable prices and capital obtained on reasonable terms. The destruction, waste and deterioration of plant facilities and other industrial equipment must amount to an aggregate, taking all of the European belligerents together, that it will take some billions of dollars worth of materials and supplies to replace or repair. The amount which Europe is indebted to the United States on the financial account because of the heavy borrowings that have been made in the American market the past three years, will probably be not far from five hundred millions of dollars for interest alone when peace is established. Europe could probably use to good advantage two or three times this amount in the process of replenishing her capital during the next two or three years if conditions generally were favorable. It may be expected, therefore, that capital will be in

strong demand in the post-war period and that much financing of an investment character will have to be undertaken by America in the process of helping the reconstruction of Europe and the reestablishment of normal conditions throughout the world.

The situation presents a duty to be undertaken by the people of the United States, as well as an opportunity to be embraced. Investment rates of interest are likely to rule high for some years and to make saving a remunerative sacrifice. There is no method by which capital can be created except by saving—by saving productive power from the production of goods destined for immediate consumption to the production of goods destined for capital equipment. It is essential from every point of view that the depleted capital of the belligerent countries shall be restored and the terrible gap torn in the industrial structure of Europe by four years of war filled up. Just as the war taught us to draw with closer approximation and finer appreciation a line between industries and goods according to their bearing on the prosecution of the war—the “essentials” being those that helped, the “non-essentials” those that delayed or hindered—so the same principle, in view of the urgent economic condition with which the war has left the belligerent countries, suggests an analogous application of the same principle—after-war essentials being those that help industrial recuperation, the non-essentials those that hinder or delay. The consumption and, therefore, the production of non-essentials must be kept down in order that the production of the new essentials may go forward at prices that will attract demand.

Europe cannot afford to buy great quantities of goods in the American market, urgent as is the need for materials of post-war industrial reconstruction, unless our prices fall, no matter how ready we stand to finance them, because Europe cannot afford to handicap her reconstructed industries with a capitalization that will not be warranted by earnings when post-war prices get back to normal, as sooner or later they will. For her industries to do otherwise would be to invite serious losses and possible bankruptcies.

Indeed, much the same may be said of our own domestic business situation. Increase of the capital account will, in general, be a perilous proceeding for any undertaking involving large permanent investment and heavy fixed charges, so long as prices of mate-

rials of construction are on an inflated basis. Thus does an inflated state of prices tend to check industrial enterprise and, therefore, to retard industrial recovery. More than that, an inflated state of prices always adds to the uncertainties and, therefore, to the hazards of business, when once the crest of the movement has been passed. Thus is a speculative tinge given to even ordinary business in periods following inflation of prices and credit. Such periods, it has frequently been observed, tend to promote speculative activities and to breed business crises. For whatever adds to the uncertainties and hazards of business not only tends to induce speculation but also, for that very reason, to add to the chances of business miscalculation and, therefore, to the percentage of business misadventure. And it is business misadventure, when the percentage runs high enough, that makes for crisis. For the business crisis is merely to be regarded as a rough and wholesale method of adjusting the capitalization of business to the indubitable facts of the market—through earnings to prices—when capitalization has gotten out of line with the price trend, the business crisis being little other than a swift and violent method of correcting errors of business miscalculation, when such errors have been extensively committed.

CONCLUSION

The more the matter is pondered, therefore, the more, I believe, the heart of our national after-war business and financial problem will be found in the price situation. There are many other factors—such as wages, taxes, interest rates—but none that is comparable in its importance to the price situation nor unaffected by it. If our price situation is quickly cleared up by deflation, wages and taxes may be expected to adjust themselves to the altered conditions. Industrial enterprise can then make its calculations on something like a stable or normal basis and the period of post-war readjustment need have little terror for us. The whole world is inflated.

A great opportunity, therefore, awaits the country, which is the first to be able to begin marking down its prices toward peace levels. The world needs us and what we can produce. It needs copper, cotton, steel, machinery and many other things. Some of these it will take at any prices but it will take much if our

prices are such as to invite foreign demand, and we need give little attention to artificial methods of taking up the slack in the labor market and otherwise stabilizing industrial conditions, if we take up promptly and proceed vigorously with the solution of the price situation.

Sanity in Reconstruction Legislation

By HON. ALBERT C. RITCHIE

Chief Council, War Industries Board

THE transition to the arts of peace presents to the statesmen and economists of America industrial problems more complex and varied than the transition, less than two years ago, to the arts of war. Our problem then was a single one. It was to concentrate the industries and resources of our country upon the work of supplying the materials needed, directly or indirectly, for war purposes.

This, indeed, involved many phases. It required the creation of new facilities to produce instruments of modern warfare which we had not produced before. It required the increase of our existing war facilities, and the conversion of non-war industries into war industries. It necessitated the curtailment, sometimes the cessation, of non-war business, and the elimination of waste and unnecessary production, so that capital, labor and materials could be released to make things needed for the war. It required priorities in production and in transportation, so that war needs could be made and moved before non-war needs, and the more urgent war needs before those that were less urgent.

But all these activities, and more besides, far-reaching and extraordinarily novel as they were, were only different avenues leading directly toward a single goal for which we aimed,—the mobilization of our resources, our capital and our labor, to the end that they should speedily produce the things necessary and helpful in winning the war, before producing things which did not contribute to that one great purpose.

Now, with that purpose accomplished, the journey back to the basis of peace is begun, and there is no longer a single goal towards which we aim. Not alone from this country, but from every part of the earth, will come calls to labor, industry and capital for purposes as many as the ambition and the initiative of men and nations, free to strive for their varied commercial and industrial interests, can devise.

On every side we hear measures suggested to aid us in our

journey from the single work of war back to the manifold works of peace. For almost every problem which can be conceived, remedies are being crystallized. Business men submit this plan, economists that, statesmen still another; and legislation of some kind is an incident of most of them.

The reasons for this wealth and variety of post-war advice are largely two: First, there is a marked tendency to regard as due to the war problems which are not really due to the war at all, but which exist independently of the war; secondly, there is inevitable inability at this time to know accurately what many of the problems which the war has really caused will be.

The first reason accounts for a large amount of suggested reconstruction legislation. The advocate of this economic doctrine or of that, sees in the experience of the war some reason for the adoption of his particular theory, and he straightway urges his theory as the solution of one of the problems which the war has left us, overlooking entirely the fact that the problem was with us before the war was thought of, and that at most the war merely emphasized its existence.

One noteworthy instance of this is the discussion of the effect of the federal anti-trust laws upon business and the question whether these laws ought to be modified or temporarily suspended or even repealed altogether. This has been recently and broadly discussed as if it were a war reconstruction problem. It is not. It is the same problem of competition against combination which first confronted the American people half a century ago, and of which our solution has been a series of statutes against combinations and monopolies, the underlying principles of which are certainly sound but the defect of which is their uncertainty, in that a decision of the supreme court is usually necessary before it can be positively known whether any business union violates the law or not.

The war has served to reopen this whole question, and the soundness of our solution of it. In the first place, in order to mobilize our resources upon a war basis, it was often required to pool production in a way which might not have been justifiable except on the ground of military necessity. This raised anew the question of whether the business of the country would be best subserved by a continuance of the same policy in time of peace.

Then the war showed how much industry can do, through organization and united effort properly supervised, towards eliminating extravagance, waste and unnecessary production, and how commercial and industrial economies can reduce and stabilize costs. All this is directly in the interests of the consumer, and yet, without the consent of the government, which would be at least difficult to secure in time of peace, industry fears to unite even for such beneficial purposes as these.

This condition could in large part be remedied by a law declaring that combinations for these purposes, which are really for the consumers' benefit, when approved by an appropriate governmental agency, should not be held to be in unreasonable restraint of trade,—in other words, a law defining the particular kinds and purposes of combinations which are reasonable instead of leaving this question, as the supreme court has done, to the application in every case of the "rule of reason" as determined by standards of judgment outside the law itself.

But this whole question, profoundly important as it is, was not created by the war. It is not a war reconstruction problem. The war has simply emphasized its existence, and the possibility of an improvement in our policy towards it. In this same class belong many other problems for which legislative remedies of one kind or another are now suggested,—woman suffrage, minimum wage, permanent employment agencies, price regulation, federal supervision over capital issues, federal loans to private enterprise, and a score of others.

In the main, none of these are true war reconstruction problems. They may have been given new life and emphasis by the war; but the war did not create them, and they should not be confused with or treated as questions which the war itself has brought to our door. Passing to this latter field, it is remarkable how very few questions are embraced within it which, at this time, are adequately and clearly defined in all their elements.

One of these is the disposition to be made of the railroads, the steamships, the express companies, and the telegraph, telephone and cable lines, all now under government control. This control was exerted as a war measure solely. What to do with it may fairly be regarded as a problem left on our hands by the war, and yet even its solution can hardly be divorced from questions of

government ownership and regulation, which have long been with us, and, in the case of the steamships, from questions which may arise from the terms of final peace.

In the same class of war problems falls the disposition to be made of the war risk insurance policies, whether they shall be carried by the government or transferred to private companies, and, in either event, under what conditions as to reserve,—although here, too, the solution will largely involve questions of government insurance and pensions which are by no means new.

The method of taxation, whereby we will arrange for the payment of our war loans for which sinking funds have not yet been provided, and for the discharge of our war debts and obligations which are to be met from the general treasury, is, of course, an inheritance of the war. It must be solved with scrupulous regard for the ability of industry to pay, and without undue obstacles to initiative and new enterprise. In this connection, two suggestions may be permitted relative to the pending income tax bill,—the speedy passage of which, by the way, is imperatively needed for the business welfare of our country.

First, the tax upon new enterprises must not be so high as to destroy the initiative to embark upon them. To avoid this, a reserve should be permitted which will be sufficient, over a term of years, to amortize the expenditures necessary to organize and bring new enterprises to a producing basis. The second suggestion is vital to thousands of manufacturing and mercantile establishments today. In computing their income for the purpose of taxation, these establishments must take into account not only their cash receipts, but also their inventory values, and the materials which make up the inventory must be taken either at cost or at market value, whichever is lowest. The going concern necessarily invests and reinvests a large amount of its receipts in the materials in which it deals, so that at the close of the year its profits are not in bank, but are in large part represented in its inventory, at either the cost or the market value of the materials. If, now, the goods are sold for as much as they or the raw materials entering into them are carried in the inventory, then this profit is realized, but if, because of a fall in prices, the goods are sold for very much less than the inventory values, then, of course, the profit is simply a paper profit, and never realized at all.

The close of the year will find the manufacturers of this country carrying millions of dollars of merchandise and materials at cost or market prices. These prices were high, because the goods were bought during a period of rapid advance in the cost and value of practically all raw materials and of finished products as well. They will go into the year's profits at these high figures. But the goods are still on hand, and the manufacturers are now confronted with a period in which there will be a decreasing value for these same goods. Prices are certain to fall, and the goods will not be salable for anything like the inventory values, and yet the inventory value is the basis upon which this year's profits must be computed.

The manufacturers of the country should not be required to pay taxes on profits which are paper profits, which never have been and never will be realized. Thousands of them could not do so without serious business hardship or ruin. To remedy this obvious and really disastrous injustice, a provision should be added to the pending income tax bill which will permit the manufacturer to deduct from his gross income a reserve sufficient to meet the probable fall in prices of the materials which are carried in his inventory at cost. When the goods are actually sold, the profit actually realized will be charged against this reserve, and the tax will be paid upon it. In this way, the government would receive taxes upon the profit actually realized, which is all it is entitled to, and the manufacturer would be relieved from paying on bookkeeping profits, never realized in fact.

The government-controlled utilities, the war risk insurance and taxation have been referred to as problems to which the war really gave rise. What else is there due to the war? Many possible questions may be conjectured and many of them may materialize. But what else is there which at this time has crystallized into a problem of sufficient definiteness to show the need for legislative solution, and which may not change or even disappear altogether by developments in this country or by actions at the peace table?

It was at first thought that legislation must be had to meet in some way the conditions resulting from the cancellation of millions of dollars of war contracts. What was to become of the vast stores of raw materials bought for these contracts and now released? And the manufacturers who had borrowed against these con-

tracts,—were they to be called by the banks and become bankrupt because they could not pay? And what of the laborers whom these cancellations would throw out of employment,—must not some provision be made for getting them work elsewhere?

Some legislation in this field has, indeed, been found necessary. Protection must be given to manufacturers who began work upon government orders without waiting for formal contracts, so that the orders might be filled without delay, and who now find these orders cancelled, and have no contract under which they can receive their just compensation. But this is only a comparatively small phase of what many believed was a tremendous problem confronting us.

As a matter of fact, these cancellations are being made under careful supervision, without undue abruptness, and with proper regard to the industries and to the labor involved, and to just compensation; because of this, and because, also, of the facility of adjustment which marks American business, the whole problem which a month ago loomed so large is rapidly working itself out.

It is the same with countless other questions for which legislative remedies are now suggested,—what to do with our returning soldiers and sailors and with our women workers, with the surplus of supplies which peace leaves on the government's hands, with our war plants which must now be converted into peace plants; the development of new and of foreign markets; the control of industrial prices to prevent ruinous competition; and a hundred and one other questions which, we are told, can only be solved through some form of government paternalism.

Perhaps the future may show that legislation will be helpful to some of these conditions; but in the meanwhile let us not forget that the soldiers and sailors who had the initiative and the industry to learn the arts of war, and the courage to face and suffer death for the victory they have won, will be able to apply themselves with equal initiative and industry and courage to the arts of peace, which, less than two years ago, were all that most of them ever knew. The women of America can take up their duties of peace without legislative assistance, just as they needed no legislation to take up their duties of war. The government can be trusted to dispose of its supplies wisely, and without competition with private interests. American industry and business initiative will

of themselves solve problems of plant conversions, new markets, and price stabilization while paternalism is still evolving plans to help them.

So we will find that problems which many now think may require legislation will not require legislation at all. They will solve themselves. Let us wait to see if this is not so, or at least wait until the problems themselves are clearly defined, before advancing legislative cures for ills which may never need them. For the rest, we must await the outcome of the Peace Conference at Versailles. From that may develop post-war industrial problems that are both real and serious. Changes in the map of Europe, iron ore, copper or other deposits or coal mines transferred from one nation to another, obligations assumed by us to transport and supply food and raw materials to Europe, lost or acquired colonies, tariff regulations of other countries, international pooling of raw materials, these and a hundred other possibilities may change the industrial balances of the world which has gone, and break down old economic advantages and barriers and erect others for the world which is to be.

These possibilities we can now see only in their outline. We can see them plainly enough, it is true, to know that allied with the international and political problems of the Peace Conference, or incidental to them, there may be questions vital to the economic and industrial welfare of our own country, the solution of which may bring us or deny us the markets of the world.

But these questions have not taken definite form as yet, and so we cannot now shape the policies which should be ours. We can, however, rejoice in the confidence that the best business brains of the country,—the brains of men whose hands have been upon the pulse of our industrial and economic life, and who know the international moves which may check it as well as those which will inspire it with renewed vitality,—will be in our country's service at the Peace Conference, watchful of our industrial situation, and suggestive as to its needs.

Thus out of it all may come not only a peace which is lasting, but also that which is essential to our welfare and future growth,—an economic and industrial progress proportioned to our natural resources and advantages and to our national initiative and due.

The Outlook for America's Industrial Future

By W. L. SAUNDERS

Ingersoll-Rand Company, New York City

WHEN we think of William Penn we always think of Philadelphia. But just now, as one reviews events during the past four years, as we look forward to a future in which we draw the picture of a better world, there comes to us another and a broader significance in the life of Penn. This man, some two hundred and fifty years ago, stood for the very principles for which America has fought a world war—liberty, justice, fair play—"the reign of law, based upon the consent of the governed." In an age when a popular revolution had almost destroyed popular liberty; when such philosophers and leaders of thought as Locke preached that government should rest upon property; when all history and all experience decried the sovereignty of the people, William Penn boldly asserted man's capacity for self-government: his vision was one of human liberty and he went so far as to establish a colony founded upon liberty. Penn was noted for his success with the Indians,—and why? Is it not because of his sense of fair play, his recognition of the rights of others? He built up a good will, based upon justice,—in fact, his whole life teaches that it pays to follow the very antithesis of the Teutonic policy. His writings are full of hope for permanent peace, something about which we are talking very seriously just now. I rather think that this was the controlling influence that has led the President of the United States to go to the peace table. It is said that after Penn had concluded his famous treaty he solemnly laid the parchment on the ground in token that the soil was common to all people. Here we have the first suggestion looking to the freedom of the seas.

During the war we were frequently asked the question,—What is going to happen after the war? The question was a very difficult one to answer, because no one could tell when or how the war would end. The story is told of Marshal Joffre, that as he was getting into his automobile during his visit to this country an American said, "Oh, Mr. Joffre, just one more question, please.

When do you think that the war will end?" Turning to his chauffeur Joffre said, "Tell this gentleman when the war will end."

Early in 1915 I sat at a luncheon next to the chairman of the United States Steel Corporation. He told me that the war must and will stop within a year, "For," said he, "it is beyond the power of human endurance to keep up such a pace." About thirty days before the armistice was signed the president of the United States Steel Corporation told me that fighting would not stop till December 1919.

For several months after the war began there was scarcely a prominent authority in America who did not predict hard times for us; our industries and mines were working part time only, our finances were disturbed. In May 1915, no less an authority than Victor Morawetz, writing in the *New York Times*, said: "It seems unlikely that there will be a general revival of enterprise or expansion of business in the United States or a healthy or lasting increase of security values during the continuance of the war." Yet shortly following this prophesy there came to us the greatest period of prosperity in our history.

STRONG FINANCIAL CONDITION OF AMERICA

I am giving from the records of the past some thoughts that may pave the way for my own plunge into the future. Let us first think of the present. Surely America was never before in better condition to stand hard knocks. Our condition is like that of the trained athlete, prepared for the combat. We are a creditor nation now and a very large creditor nation too. Europe owes us about eight billions in bonded debt alone. Our banks have one-third of all the gold in the world, yet (and this is an element of strength for us as well) the banks of Europe have more gold in their vaults than they had when the war began. Our federal reserve system has been established. It provides a public reservoir in which reserves are held for use and concentration at points where they are most needed; by its privileges of rediscount money is kept liquid; through federal reserve notes credit is made elastic. The strength of this system is such that we might now without danger export much of our gold to enable other nations to maintain stable conditions of exchange.

At the close of our Civil War we had a bonded debt of three and

one-half billions. When peace is made we are likely to have a debt of twenty-five billions, eight or ten of which will be in the shape of foreign loans. Comparing our increased wealth, our population and our development in financial and industrial resources, it is apparent that we are in a stronger position now than we were after the Civil War. Everyone expected a collapse in industry then; inflation was high because of the issue of greenbacks, yet no crisis came. Business activity continued till 1873. A million soldiers were demobilized then and the industries absorbed them without shock. We shall dissolve an army now three or four times as large, but the country has grown in far greater proportions. It is interesting to note that wholesale prices fell some 30 per cent at the close of the Civil War. Though conditions now are not identical, yet there is every reason to expect a fall in prices of staple commodities in the near future. Food and fuel are likely to be exceptions because of the needs of Europe.

There is much fallacious teaching about the material loss incurred by war's destruction. In peace times nations increase in wealth in proportion to the productivity of the farms, the mines and the industries. In war time that which is produced and destroyed, as for instance munitions, must be subtracted from the annual increase of wealth. Some of the belligerents, such as France and Belgium, have probably gone backward, have grown poorer in material things because of actual destruction of property, but England has probably had only a diminished rate of increase of wealth because of the war; or, in other words, the normal increase has been somewhat retarded because much that has been produced has been destroyed. This, if true at all in the case of the United States, is true to a lesser degree, because of our late entrance into the war and the lesser proportion of goods destroyed. Except for the increased burden of taxation and conditions brought about by credit inflation, the ending of the war ends the burden of the war; the cost has been paid during the war.

We have witnessed the destruction of the prophetic but fallacious idea so generally held, that a world war must of necessity be a short one because of the great cost. We know that this war did not end because of lack of money. The money used did not come from a storage fund already on hand, but chiefly from goods pro-

duced daily while the war was going on. Our resources were mainly employed to build things that were promptly destroyed, hence while there was a great waste of energy and a loss of potential capacity to add to our capital, yet we are no worse off now so long as we retain our capacity to still produce useful goods. That capacity we have to an even larger degree than before the war.

It is plain that had America not entered the war we should have been industrially and financially richer. Whether we are richer because of the war than we should have been following our normal progress, it is impossible now to determine. We do know, however, that our industries have been enlarged on an unprecedented scale. Much of this took place before America entered the war and at a time when profits were high, so that a good deal of the plant increase has been written off. The tools and equipment purchased for war purposes are mostly standard and with some exceptions they may be used for general industrial purposes. The steel industry in particular has a large capacity in works and equipment. Much steel will be required throughout the world.

A BETTER LABOR SITUATION

As to labor, the situation is better than ever before because of a better understanding between employer and employee. We shall hear of strikes and rumors of strikes. They are likely to come, first through the process of readjustment, which has already begun in cutting off overtime. During the war, and partly because of conditions brought about by the war, industrial work generally has been put on an eight-hour basis. That is, the rate of wages has been so much per hour for eight hours' work. During the pressure for output, works have been run ten hours and more and labor has been paid extra time for this extra service. This means of course, that the income which labor has received has not only been an increased rate per hour but a still further increase in net earnings due to overtime.

As soon as the armistice was signed overtime was cut off, which means about 25 per cent reduction in the income which many workers had been receiving. This income was, of course, strictly speaking, a war income. Labor was pushed to do more work in many cases than conditions of human safety and comfort should warrant. If we are to agree that there is a period of fatigue, which

comes say after eight hours of labor, then it is not only inhuman but it is uneconomic to work beyond eight hours. Mr. Vanderlip, in a recent address, said that his plumber told him that he had been making \$400 a month during the war doing war labor; that this had been stopped and that he now expected the government to see to it that he should still make \$400 per month. Of course such an argument is fallacious and unreasonable—just as unreasonable as similar claims if made by employers that they built and equipped their works at the request of the government for war service and that now that the war is over they expect the government to keep their works going.

We have already heard of the just decision of the United States Steel Corporation to make no reduction now in labor prices, but to make a moderate reduction in the price of steel. Manufacturers have been making from 10 to 50 per cent profit. They can well afford to lop off some of this in the future and to do it without calling upon labor to share in the reduction. After substantial reductions have been made in profits, because the war is over and prices should fall, it is not unreasonable to suppose that labor will then be willing to do its part in meeting the situation.

It is a common error to suppose that low cost of labor means low cost of product. What is needed, and what we have to a large extent now, is effective labor—labor that produces in proportion to what it is paid. That effectiveness is so great that it has been estimated to be two or three times superior to the labor of Europe. The ending of the war and the bringing about of a surplus of labor, through the release of men from the army, through the cutting off of incompetent workers to give place to better ones, and through a relief of the pressure to produce a large output, are likely to increase the efficiency of labor per unit of product. This means that manufacturers can afford to make some reduction in prices to meet conditions, especially if there is to be, as is likely, a reduction in the cost of raw materials.

But the most wholesome and promising outlook of all is that capital has taken a new view of the labor situation. Instead of the old idea of master and slave, followed by that of owner and servant, we are now entering a period of brotherhood in industry. The employer is now striving to look at things from labor's point of view. He realizes that those who spend one-third of their lives

or more on the floor of his works should really have something to say about the conditions that exist there. We have seen of late the encouraging spectacle where employers of labor, through organizations and through boards of trade and chambers of commerce, have adopted resolutions of a conciliatory nature toward the workers. The most striking instance of this is a recent report of the Committee on Industrial Relations of that old Bourbon organization, the New York Chamber of Commerce. This committee reported, and the chamber unanimously adopted the statements that the chamber wishes to go on record as favoring close association of wage-earners, managers and capitalists in all large industrial establishments, the formation of representative committees for adjustment of disputes, and as advising that wage-earners, managers and capitalists be brought into direct contact with each other in solving labor problems.

If we agree that our industries are keyed up for service, that they are in condition to produce on a large scale, the question naturally arises,—who is going to buy the goods? It will not do to purchase only for stock. We must look for markets. Where are they and how are we to secure them?

In the first place, the war has produced a vacuum in the stocks of the world. So much of the product of industry has been turned to things that have been destroyed that little attention has been paid to producing and enlarging normal stocks of goods. Furthermore, there has been little activity in building operations, new construction, repair work, etc. Economists tell us that in times of peace the stocks of the world, such as steel, coal, oil, dry goods, boots and shoes, etc., are about equal to one year's supply. In other words, if production should stop, there would be enough on hand to supply the needs of the world for a year. If this is true, and of course it is only partly true, there is much work ahead of us in simply putting our house in order.

But the vision which the ending of the war presents to America is a broad and alluring one. There are not many great industrial nations in the world. America is one of the largest. The others, England, Germany, and to a lesser degree France and Italy, are either incapacitated or handicapped. America is free from damage to either her finances or her industries. America, through her entrance in the war, changed the sentiment of the world to-

ward the war from one of conquest and territorial acquisition to that of service, of justice and fair dealing. We went in to serve humanity, to see that the individual, as well as the nation, got its rights, not alone in its own country but throughout the world. This has established good will,—a thing which every business man knows is worth as much and even more than property. I have known of large concerns in business that have gradually gone down hill—some of them to bankruptcy—because they lost their good will. Good will is something which is not easily attained. It is seldom acquired except through a large period of service. Here we have a situation brought about by the war in which America's good will has been established, as it were, over night. We have seen this in many ways. Our men in arms are received with cheers everywhere, even in Germany; our President has been called the George Washington of the Czecho-Slovaks. All this means that the avenues of trade are open to us. How do we propose to take advantage of such a situation?

Let us be careful that we do nothing to mar this feeling of friendship and esteem, let us see to it that in trading with the world we seek to sell first what our customers need and want most and not what would bring us the largest margin of profit. This is a new spirit in trade. No nation of the world has ever followed it. The greatest industrial nation—England—with all her liberality, with all her civilization, and with all her power, has pushed British trade throughout the world with a spirit of profit and with little recognition of the higher virtues of consideration and co-operation with others. Germany, differing radically from England, has pushed trade by dishonest practices. Her course has been that of the brute. The money of the state has been used and the people of the state have paid for it, to push her products against all economic conditions, regardless of cost, for the purpose of making money through her banks and establishing business for her industries.

TRADE DEPENDENT UPON LARGE BANKING CONNECTIONS

It is a new idea, I say, but a very practical and paying idea, that America should seek to trade with the world in the spirit of service. We have seen how unpopular Great Britain has become because of her aggressive methods of trade. We have seen the

destruction of Germany because she did not play fair. We have the field open before us. We shall soon have a merchant marine sufficient to trade with the world. We know that the building up of our own natural resources during the past fifty years has been the means through which America has grown rich. Our time, energies and money have been so occupied at home that we have given little attention to foreign business. Now is our opportunity. South America alone is larger than the United States, is more undeveloped than we were fifty years ago. France, Belgium, Russia, have suffered to the extent of billions of dollars. We have an opportunity to restore them. We have a further opportunity to improve their harbors, to develop their natural resources, and to do exactly what we have already had experience with at home. To do this well calls for all that is best within us, morally and intellectually. To do it thoroughly means banking connections on a large scale. It means that we must go personally to foreign countries and get personal contact with the people there. We cannot expect to be paid in gold, because most of it is in America. We cannot expect to be fully paid in return goods, because the volume of trade should be largely one of export.

There is only one other way left for us and that is to seek and cultivate credit abroad through investment in foreign securities. In other words, we must build with the credit of the people whom we are serving and with our own money invested in their industries. This is not so difficult as it appears. When the war began only some three hundred thousand Americans were bondholders. Today the number has reached twenty million. The American people have been educated to buy bonds and securities. We must educate them still further by showing them that it is clearly in their own interest that America should do a world business.

President Wilson said to me but a short time ago,—“I am not so much concerned as to whether we shall have good business after the war. The thing that concerns me most is whether or not the American people will be able to stand that great prosperity which is in store for them.”

Some Thoughts on Our Shipping Policy

By HON. BAINBRIDGE COLBY

Member United States Shipping Board

THE question of the nation's policy with regard to shipping is not for the Shipping Board to decide. The Board may make recommendations. It may state opinions, deduced from its studies or from its experience. But the formulation of a policy rests with Congress, and it is for Congress to say whether the large and growing merchant fleet shall be operated by the government or by individuals as agents or lessees of the government, or as purchasers from the government. The Board is a branch of the executive power, and under the directions of a statute passed by Congress has called into being a strictly emergency fleet. The total number of vessels constructed, equipped and put into service under the Board's direction from August 1, 1917, until November 23, 1918, was 519 vessels, of a total tonnage of 2,867,000. The additional vessels which have since been delivered into service will bring the total of new construction up to approximately 3,300,000 tons by January 1, 1919.

THE SUCCESS OF AMERICAN SHIPBUILDING

The grim necessities under which this task was undertaken have been met. The effort of the enemy, with its indiscriminate program of sinking merchant vessels, has come to naught. Its effort to paralyze communication between the Allied nations failed. This failure has been largely the result of America's great contribution to the world's successful effort to construct and restore tonnage faster than it could be destroyed.

A fair appraisal of this success can be made only if the fact is kept in mind that shipbuilding and ship management had become almost an alien industry to our people. So blind and ill-informed had been the course of legislation in this country for sixty years that America's proportion of her own foreign commerce, carried in her own ships, fell from a percentage in excess of 90 to 8½ per cent shortly prior to the outbreak of the European war. When the great crisis overtook us, we were confronted by

the necessity of creating, on an unprecedented scale, a new industry. We built the best ships we could, in size and type, with the ever-present duty before us of making everything subservient to quantity and speed in production.

The armistice found the shipyards of this country rapidly growing in efficiency and in the rate of output. We were making ship-builders as well as ships. We were approaching the peak of production. And now, with the passage of the great emergency, we are in a position to take an inventory of what has been done, and to review and in some respects recast our program to meet the criteria of sound business and of competitive operation, instead of considering solely the emergency and the stern but simple measures necessary to cope with it.

Our ships are of good design, the greater number of them of sufficient carrying capacity and speed to make them highly efficient instruments of commerce. It is true, however, that we have built a considerable number of ships of relatively small carrying capacity, whose utility in commerce is qualified by that fact. These smaller vessels can be used advantageously only in coastal or insular trades where their carrying capacity will not be greatly reduced by fuel carrying necessities. In addition to the ships completed, upwards of 12,000,000 tons of shipping are either on the ways, far advanced toward completion, or under contracts which cannot be cancelled except at a great sacrifice of values. What shall be done with this fleet? Although it is authorized as an emergency fleet, it is a merchant fleet none the less, of important extent at present, and of very much greater dimensions in prospect.

I have a personal opinion on the subject. It is the reflection of opinions entertained by many men who have given their lives to the study of shipping problems, and who have achieved large success in shipping operation. I do not, however, offer it as an official expression, but it is high time that sober thought is directed to the subject, and what I say may aid in crystallizing a sound public opinion.

SHALL WE HAVE GOVERNMENT OPERATION?

My personal view is against government operation of our merchant fleet. The business of ship management, the expert grasp of domestic and overseas market conditions, the shrewd sense of

trade, presuppose personal initiative and require individual enterprise. A public administrative body could hardly meet such requirements on a small scale, much less on the unprecedented scale that operation would assume if applied to our large and growing national marine.

It has been suggested that the government operate its merchant marine for a limited period, availing itself of the high freights which the war has established and which will not instantly decline to normal levels now that active military operations have ceased. The theory underlying this suggestion is that the government can in that way amortize the excessive war costs of construction and reduce the value of its fleet to a point within the resources of prospective purchasers, and to a level more nearly approaching post-war commercial costs than the high book cost which our ships represent at the moment. This proposal has logic and some measure of attraction. But I incline to the opinion that a failure to achieve the larger commercial objectives through such an extension of the period of government operation would more than counterbalance, by its indirect losses, the immediate gains through government operation. The management of a ship, the selection of cargo, the hunt for markets, the study of customers' wants, the nice calculation of loss and gain, the intricate problems of routing, with the delicate interrelation of all these factors, demand as an indispensable factor in the right solution of our shipping problem, the element of personal ambition and individual interest.

There is still an important government function which nothing can supplant. We should both build and operate, but not as a general policy; merely in my opinion as a stabilizing and contributory function in the upbuilding of our merchant marine. We should build a substantial number of ships, with the view of stabilizing work in our shipyards, and bringing about that sustained and steady demand for tonnage of standard type that would enable our shipbuilders to reach the low costs without which the industry cannot be kept alive, and incidentally attaining that proficiency in the craft of shipbuilding which is a vital element in the problem of costs.

As to operation, the government may well undertake the pioneering for new trades, and by its own operations, pursued

judiciously and not in any sense competitively with our own ship-owners, establish regular lines for freight, with fixed schedules of sailings. This work, in fact, the government must undertake, to a large extent absorbing the initial cost, which will be justified by the large benefits flowing to the nation's trade as a whole.

Only when the nation's shipping is recognized as a national asset, not the exclusive concern of any one section of the country nor a source of enrichment to any special class, will we approach this problem with enlightenment. The test of any policy is not the profitableness of the immediate operation, but the benefit to the nation's trade and commerce as a whole. The merchant marine is the delivery system of the nation's business, and our shipping policy must seek its vindication in the widening of our commercial field, in the multiplication and diversity of our undertakings, and in the deepening of the foundations of our national prosperity.

The Industrial and Commercial Outlook

By HON. H. A. GARFIELD

United States Fuel Administrator

I HAVE not, during the past year, accumulated a fund either of cynicism or skepticism. I still believe in my fellowmen, and I still look upon the public of America as properly interested in and at reasonable and proper times given to chastening duly their public officials. All of which makes me believe more in democracy than I ever did before. It leads me to recognize that representative democracy is not a failure.

When I left college I entertained the belief, shared, I suppose, by a great many young men, that the world needed reforming, and that we were going to reform it; I believed also that public officials were running things to suit themselves while the people went about their several tasks indifferent to the public welfare. The experiences of the last year convince me that I was mistaken.

While it is my purpose to speak of the outlook rather than the look-back, I venture to give a single illustration of what Mr. Miller has had to say¹ concerning increased productive capacity.

In the production of coal there were engaged in pre-war times a great army of men, perhaps 750,000 of them throughout the country. When one has looked at the reports of previous years, it has been with amazement that the amount of output of coal per person was so small. It was also surprising that the number of days during which the miners worked was so small. I make haste to say that I do not mention these facts as in any sense an indictment of the miner, for he has labored enough to produce the needed amount of coal. The significant point, with reference to our experiences of the past year is that, with a large reduction in the number of men at work, the total amount of coal produced has exceeded, far exceeded, any record heretofore made.

The ability and willingness of our mine-workers to increase production when the need arises and the call comes have been amply demonstrated by the work of the past year. The coal miner produced year in and year out before the war an average of from

¹ See page 308.

three to four tons a day—the amount depending in each case upon the way in which the coal lies in the ground and the difficulties to be overcome in getting it out; but during this past year in many districts a single miner has produced ten, twelve and as high as thirty-five tons a day. I speak, of course, in these latter figures of special instances, in the former of averages. The two statements cannot therefore be compared. I have not the average yet for this year, but I am sure that we will find a very much higher average per man than heretofore.

What shall we do to assist in the readjustment from war to peace? Shall we follow the advice of those who say, "Cut away all supports and let drop what must drop, at once?" Or shall we pursue a more deliberate policy and gradually take away the supports, or, if you please, the restrictions which have been placed upon business during the past year? I believe the truth is found between the two extremes. The principle generally advocated by the American people is that we be left free, that individual initiative be developed and relied upon in the performance of our several tasks as fully as possible; this seems to us to be the normal way. When, however, in a great emergency the government has found it necessary to step in and interpose artificial but very necessary restrictions upon industry, then a condition of things is introduced that is abnormal, and the query very properly before us is whether we ought not to remove those restrictions with some deliberation. My own judgment is that we may set about the task with too much zeal, that there should be a certain amount of holding back, and yet not so much as to artificially hold prices at the high level. Because, as Dr. Miller points out to us,¹ if prices are artificially maintained at the high level it will in the end work an injury to our industry in competition with industry elsewhere; and that, of course, must reflect itself in the end by injuring the wage-earner.

THE INDUSTRIAL AND FINANCIAL OUTLOOK

Two points are suggested by the topic, "the industrial and financial outlook." I think of industry—as our industry at home. I think of the financial relations here intended as having to do more particularly with commerce abroad.

¹ See page 320.

The statement made by Mr. Ritchie,³ to the effect that many of the problems we are talking about as though they were new problems having to do with reconstruction or readjustment from war to peace, are in fact not new, but old, is true. And yet it seems to me that in dealing with the industrial outlook, we have presented to us an aspect of the labor question so new and so important—with such a new emphasis, perhaps I ought rather to say, upon the relations of capital and labor—that it presents virtually a new problem, a real problem, one growing out of the experiences of the past year.

The illustration which Mr. Saunders gives appeals to me very much⁴—men meeting with their employes on common ground, the familiar factory ground, or wherever it may be, and considering questions as though they affected all, as indeed they do. We have learned the truth of this during the past year. For example in the Fuel Administration over and over again it has been necessary—some strike pending or operators in some region threatening to put in force regulations that would work an injury to labor—whenever a question of that kind has arisen, that I telegraph to representatives of labor and of the operators to come to Washington. They have always come, and we have said to them something like this: “All these questions that divide you must be put aside. America is at war. You have one thing to do, and one thing only; you have to produce coal from the mines and put it into cars. Now, if you, and if we, be true to the great task that presses upon our people at this time, you will agree with me and put aside your differences.” They *have* agreed with me and they *have* put aside their differences, with the result that they have learned how to coöperate, not only in the common purposes connected with the operation of mining, but in the greater common object by which we have all been absorbed during this year.

Government has its proper part in all this. We are learning that the question of capital and labor is no longer a private question in which government has no part. We are coming to see that it is a three-cornered question: Government on the one hand, not owning—that is rather a crude way—but supervising industry;

³ See page 324.

⁴ See page 335.

and on the other hand, labor and capital;—the three coöperating in a common purpose for the benefit of all.

Now, then, one other word as to the second point, concerning the commerce which is international. What is this new stage upon which we are about to enter? It resembles the first in this,—and the President of the United States has expressed it,—the spirit of coöperation is not to be confined to any group. It must be given its full play in the dealings between men at home and between governments in their international relations.

It was said not long ago that the proposals of the Paris Peace Conference of 1916, which advocated war after the war, would work injury to the Entente Allies. The statement was that, if the policy of war after the war were adopted, the coal in German territory could no longer be brought out to the steel plants in Lorraine; and that if that happened there would be great injury to the steel plants in Lorraine, because they would have to go two hundred and fifty miles to England for coal, the French mines being out of commission by action of the German armies, thereby greatly increasing the cost of steel production in the plants around Metz. On the other hand, the coal lying in the German territory is only from fifty to one hundred miles away, and if there were war after war, those coal mines would be cut off from the shipment of eight million, three hundred thousand tons of coal a year, which normally move from Germany into France. This same authority whom I am quoting said: "If you cut that off, the inevitable thing will happen; these eight million tons will move north into the Scandinavian countries and cut off the supply that normally comes from England into those countries, because Germany must sell her coal and will cut under any price offered by England. Germany would be forced, in other words, to dump her coal.

Now, that is a hard-headed practical proposition. By whom was it stated? By pro-Germans? No. It was said by Englishmen. It was printed in a report appearing within this calendar year, by a committee of which Lord Rhondda was chairman, and afterwards Mr. Nimmo, and calling attention to the folly of war after war, so far as the coal trade was concerned.

Similar illustrations can doubtless be produced in other fields. Ever since the days of the mercantile school,—since Adam Smith

gave us a new light upon economic questions,—it has been understood that I do a very foolish thing if I prevent you from producing that thing which you have and I want.

At the present time one of the problems which presents itself to our President and the peace envoys is the question of preserving so far as possible among the nations of the world, the kind of free exchange that depends upon the prosperity of each of the parties to the exchange. That principle is not accepted yet with patience, even when an English committee gives us the illustration and the facts, because we are inclined still to look upon Germany as an enemy. She is technically still an enemy; but we are about the business of making peace,—peace with whom? Peace with friends? No, peace with enemies; peace with the world. And if we carry our purpose out in a sensible way, it will be so carried out that nations will rise in their strength not against nations any more, but in coöperation—in “coöperative competition,” if you like—no longer standing jealously against each other, but coöperating in friendly rivalry to the end that you and I, men and women everywhere may be benefited thereby. The outlook is of vastly improved relations between human beings in their dealings with one another as producers in labor at home and in the great interchanges of commerce and finance the world over.

Some Phases of Financial Reconstruction¹

By PAUL M. WARBURG

Former Vice-Governor of the Federal Reserve Board

AS destruction once begun on the battle field spread its waves until its effects had reached all parts of the world, so the work of reconstruction will involve the whole globe far beyond the centers originally affected; and as the character and extent of the disturbance differ in each country affected, so the word "reconstruction" will have a very different meaning in the various parts of the world. In some it will indicate the physical restoration of the tangible things actually destroyed, in others financial or commercial rehabilitation; in others it will mean the reestablishment of normal levels of living and working—a return, more or less, to pre-war conditions. The last named group includes the United States. Considering the question merely from the domestic point of view, "the movement back to normal" would appear as the main aim and characteristic of our own problem of reconstruction.

Several thoughts, however, will at once occur to us at this point and emphasize the complexity of our task.

First. That the normal of the past is not likely to be the normal of the future, which raises the further question of what that normal ultimately will be.

Second. That between our present level and that of the future there will of necessity be a period of transition—which raises the question of how long or how short it should be.

Third. That both on account of the moral obligation involved and on account of the effect that reconstruction in other countries must needs exercise upon our own future economic and financial development, we cannot possibly consider the problem as a purely domestic one—which raises the question of purchases on credit by foreign countries and the influence of foreign purchases upon the course of prices.

And finally, that the return to the new normal level must not be construed simply to refer to the level of prices and wages, but that it includes the new norm of government influence in business—which raises the question of the restoration of the freedom of individual action and operation, willingly surrendered in the face of war, but held sacred and inviolable in times of peace.

¹ Address delivered at Atlantic City, N. J., on December 6, 1918, before the War Emergency and Reconstruction Congress of War Service Committees of American Industries, under auspices of the Chamber of Commerce of the United States of America.

To sketch the problem in its vast outlines is to acknowledge our inability to treat it adequately even within the limitation of some of its phases. For it is evident that the plan to be applied in grappling with the side issues must depend upon the general policy ultimately to be adopted by the government in dealing with the whole problem. That is the reason why in discussing the topic of financial reconstruction only the obvious can be stated with confidence at this time, while wide room is left open for assumptions and speculations whenever we try to go further afield.

My justification for taking up some features of the financial side of the question is that I believe that by carefully analyzing the problem we may assist in clarifying it, and succeed in disposing of some of the fallacies befogging the issue.

In looking into the future we have as yet no definite landmarks upon which we can fix our range-finders in order to ascertain just where the line of demarkation will lie between the transition period and the era following it. We know, however, whence we came, we know our present conditions as our actual starting point, and it must be our first aim to try to gain as clear a conception as possible of our ultimate position, so that in dealing with the interval and the co-related problems, we may map out a course that will lead us towards that final goal. Let us begin then with the obvious things that we may be able to discern distinctly.

As I look through the telescope into the period following that of transition, I see a United States to which the world at large will be heavily indebted, and to which annually hundreds of millions of dollars will be due as interest on loans extended, in addition to the hundreds of millions due in payment of the raw materials we shall be able to spare for other countries. I see an industrially highly developed country which, with the exception of a limited number of articles, will be capable of producing most of the necessities of life for the consumption of its own people.

I perceive, therefore, a country amply protected by a vast annual international credit balance, a country which by keeping some portion of its foreign security holdings in the form of reasonably short obligations, should be able to protect itself against any serious encroachment upon this creditor position; a country owning a huge gold stock—a country, in short, which need not

give itself any great concern with regard to the task of maintaining the parity of the dollar exchange all over the world.

I do not wish to pose as what the British wittily have termed a "war prophet-eer," but I much misread the future if it does not have in store for New York the position of a world exchange center, vying with London as a free gold and discount market. As I see it, our future economic position will be of such strength that it will be difficult for many countries to keep their exchanges at par with us. They are not likely to have sufficient quantities of the goods required by us, nor will they have large amounts of gold to spare, and therefore, in payment of the things we sell them and of the interest they will have to pay us, they will have to try to find something else than goods that we may purchase from them; that is, they will offer us the individual or collective obligations of their nationals, or their industrial enterprises, or such securities or assets of other countries as they control. If we want these countries to continue to be able to buy our goods, it is therefore incumbent upon us to prepare ourselves to grant these foreign credits and to buy and assimilate these foreign assets.

FINANCING OF THE WORLD'S TRADE

In order to carry out this program several things are necessary. First, our banks and bankers must be able and willing freely to extend their acceptances for the financing of the world's trade.

It is inevitable, if our banks and bankers continue to show the same spirit of enterprise and patriotism they have demonstrated during the war, that in the financing of the world's current trade we shall have a very large share. As a matter of fact, we owe it to the world to bear a substantial portion of this burden. To that end the discount rates of the federal reserve banks and the policy of the Federal Reserve Board with respect to acceptance transactions must continue to be liberal. I can well foresee the time when American dollar acceptances will be outstanding to the extent of more than one billion dollars in credits granted all over the globe.

Three years ago, when it was my privilege as a member of the International High Commission to visit South America, I found that the banks in that hemisphere hardly realized that there existed such a thing as dollar exchange or an American bankers'

acceptance, and our own banks and merchants had to be coaxed into using them. Now these acceptances are well known and eagerly sought all over the world.

And as our banking power and machinery develop, there unfold new opportunities for foreign branches of American banks. There are today about fifty branches of American banks in foreign countries, besides a considerable number of affiliated banks and sub-agencies largely in Latin-American countries, and more are being opened every month of the year. The Federal Reserve Bulletin in its recent numbers has given the fullest data concerning the operations of the banking institutions engaging in these foreign enterprises. They are covering at present almost every country in South and Central America, they have penetrated the Philippines, Japan, China and India, and we find them established in England, France, Italy, Spain, Belgium and Russia.

But while much has been accomplished as a beginning, while the marvelous strides that our banking system has made during the war are as unparalleled as the rapid creation, equipment, training and transportation of our armies, more remains to be done. While it is most satisfactory to note that several discount companies and acceptance corporations have been organized, it is my belief that the future will show a very distinct need for a larger number of acceptance corporations.

As the liberty loan bonds are absorbed by the public and as the paper secured by these bonds and rediscounted with the federal reserve banks is liquidated, the enormous resources of the Federal Reserve System will become available for regular investment in bankers' acceptances to a larger extent even than in the past, and will prove a tower of strength, protecting our discount market at rates which will compare favorably with those of the strongest amongst the old established countries.

These conditions are likely to bring about a constantly growing demand for American acceptances, and I hope that not only banks and acceptance corporations but also private banking firms will energetically cultivate this new field of enterprise. As is well known, private bankers were pioneers in England in developing the foreign acceptance in business.

The war being over, it is now the privilege of our bankers and

financiers to make themselves generals in the arts of peace, and to call out as volunteers the best talent, now happily again available, for the constructive pursuits of commerce and trade in all parts of the world.

There is in this call no challenge to England; she will, I am certain, retain her logical and traditional position of a world center of commerce and finance. Moreover, once we return to the time when trade between nations is no longer financed by the issue of government bonds, the old machinery of bankers' acceptances and investment banking will be so heavily taxed in both countries that England and the United States, soon to be joined, we all hope, by France, will be only too glad to find partners with whom to divide the burden and, rather than envious competition in securing the load, there will be a tendency of wishing to place a fair share of it on "the other fellow." No doubt some of the neutral countries, whose financial strength and independence have greatly increased during the war, will play an important rôle; while Germany's place as an international banker will have to be considered as vacated for some time to come.

Bankers' acceptances, however, while important factors as temporary equalizers of international balances, and invaluable, furthermore, in their incidental effect in creating centers into which other commercial and financial transactions will naturally flow, cannot be expected to offer the proper medium for settling the vast permanent indebtedness to us which we expect to see accumulating from year to year. These large balances must be offset not by temporary credits but by an outright transfer to us of foreign assets. This may be brought about essentially in four ways:

1. The debtor country may sell to our government its own government obligations (our government in turn financing itself by the sale of United States Government bonds substantially in the same manner as adopted in financing our Allies during the war). Or

2. The debtor country may sell to our investors (instead of to our government):

- (a) Its own government obligations, or
- (b) Industrial stocks or bonds originating within its own boundaries, or
- (c) Stocks or bonds owned by it but issued in other foreign countries.

The first method is not likely to be employed extensively beyond the beginning of the transition period. The other three

methods are the ones that in the long run we may expect to see develop as the most practicable forms for which we must prepare ourselves.

In order to bring about in the United States the successful absorption on a large scale of foreign securities, it is necessary that our investing public be educated properly to appreciate these foreign investments. That will only be possible as our banks and our business men going into foreign countries bring back to the "folks at home" frank and reliable information concerning the risks and chances of the proposed investment, concerning the resources of such countries, the character of their people and their political and economic conditions.

Intimate commercial relations with foreign countries create the atmosphere of understanding, interest and sympathy which alone renders possible comprehensive international financing; and inversely it is such financing that encourages the growth of trade relations. There is a relationship of close mutuality between business man and banker in this respect. For the fullest success one is dependent upon the other, and the country at this juncture depends upon both. To go out into the world, to study foreign conditions, to open new avenues of commerce and finance and to develop in this country a group of men whose word and judgment with regard to foreign enterprises we shall willingly trust, is a national enterprise that should appeal to the ambition and public spirit of the ablest of our coming bankers and business men.

In times of temporary adverse trade conditions or unexpected emergencies, the ownership of foreign securities is moreover of the greatest value to the country. We need only to think of the invaluable source of strength they proved to England during her hours of trial. I believe we may safely say that it was the use of these foreign holdings (North American and others) that enabled England to finance her own foreign purchases and those of some of her allies without breaking the rate of exchange of the pound sterling during the first period of the war. But from this episode we should draw the lesson that the advantage of holding foreign securities consists in no small degree in the ability of selling them in several markets, and in creating a market here for foreign securities we ought to remain mindful of that fact.

Before 1914, the large holdings of American securities in Europe and their wide market on both sides of the ocean furnished an important instrument for equalizing temporary debit balances by the so-called "arbitrage" of securities. The back flow of our own securities must have destroyed very largely these economically important pre-war conditions. We can well imagine that government bonds with international markets will play an important rôle in restoring the basis for an easy exchange of securities, that is, a healthy trans-Atlantic bond arbitrage. In going into these new fields of foreign investment and trade, let us start out with a generous, sympathetic and receptive mind; with open purses—but also with open eyes and conscious of our serious responsibilities in the matter.

It is unfortunately true that wherever the faithful pioneer goes, there also migrates the crook. In opening the markets to foreign financing, almost every country fell victim to the occasional robberies perpetrated by reckless promoters. The local knowledge of American business men and bankers living in these foreign countries may prove an invaluable protection in scrutinizing these propositions. But, if I may be permitted to express my thoughts in the premises, I believe that for the better protection of both the public and the careful and self-respecting banker, it would be advisable to establish some generally accepted rules governing the information to be contained in a prospectus offering for sale foreign securities. Every great international market enjoys such rules, established either voluntarily by the stock exchanges or by the government.

If we are to be a world center of finance, as I am profoundly convinced we shall be, I believe we ought to take steps that will give to the American prospectus the same standing and prestige as is enjoyed by those of the leading European markets. I can well imagine that by common and voluntary agreement some sort of a future capital issues committee might be organized in each federal reserve district to give its stamp of approval to every such prospectus before the quotation on the stock exchange be granted or the offer be made.

Such approval would not signify the passing upon the intrinsic merit of the security involved, but it would give assurance that all essential facts, and nothing but authentic information, be

contained in the prospectus and that they be stated over the signature of the borrowing government or corporation and the issuing house. This is, as a matter of fact, no more than a responsible issuing house would observe. It would be a burden, therefore, only upon less conservative firms, upon which a check ought to be exercised. While, no doubt, some red tape and delay would be involved in such a proceeding, it would in the long run prove well worth while to submit to it. The chairman and governor of the federal reserve bank of the district might be invited to head the committee, as at present. They and others would, no doubt, be found willing in the general interest to shoulder the burden.

When the present Capital Issues Committee in due course, by the expiration of the act, discontinues its operations, it is possible that such new local capital issues committees might exercise a very important function in protecting the country in this further respect: Issuing houses in Europe do not generally enter into contracts for the purchase of foreign securities without first inquiring at their headquarters whether or not such issue is in the public interest. It must be borne in mind that when concluding these loans not only the relationship with the borrowing country must be considered, but also the condition of the purchasing country as a whole. Excessive foreign loans may at times adversely affect the entire network of trade balances, exchanges and interest rates, even though the transaction may be of great advantage to particular industries, and even though the contracting country itself may be heavily in our debt. The situation as a whole, therefore, should be carefully weighed in such cases by the Federal Reserve Board which, when approached through the local capital issues committee, would give its advice.

It may be timely to point out in this connection that foreign bonds payable in several currencies would prove of great value in times when gold exportations might become imminent in consequence of unexpected temporary financial dislocations. In such circumstances interchangeable international bonds could well be sold abroad in order to replenish our foreign balances, warding off to that extent exportations of gold.

In sketching this program for the future we cannot be unmindful that in certain important respects it will not meet our imme-

diate needs, because it will take time to develop in the United States as wide a market for foreign securities as is here contemplated, while most urgent demands by foreign nations are near at hand. We know that almost all European countries for a prolonged period will require food, or steel, or copper, or cotton, or machinery with which to rebuild their life and industries. Many of them at present have neither gold nor goods with which to pay us. Individual and banking credit in some cases has been seriously affected, and in others has not yet had sufficient time to establish or reestablish itself. Without doubt we shall consider it our proud privilege to give whatever we can spare to those that deserve our aid, particularly to those who, like France and Belgium, have an undoubtedly valid moral claim on us, and to that end we shall have to continue to reduce our own consumption to the necessary degree.

It is at this point of our consideration, however, that our ship strikes a fog bank and that we shall have to feel our way in the mist as best we can. There are quite a number of factors about which, for the time being at least, we are uninformed. We do not know whether during the transition period Congress is going to authorize advances by the United States to foreign countries in order to provide the means with which to pay us for their purchases of foodstuffs or other necessities. At present the symptoms point the other way.

If, however, the government itself is not going to finance the sale of these goods, the volume of such foreign purchases is likely to be reduced or at least delayed so as to synchronize with the amounts of dollars that can be raised here by the opening of temporary banking credits, or by the free sale in our market of foreign government bonds or foreign assets. In that case our exports are likely to move at a slower pace and there is less likelihood of a congested demand for goods for export, and therefore, prices are likely more promptly to find their own natural level.

Conversely, should the United States Government decide to advance the amounts involved to the purchasing nations, greater immediate stimulation of certain export industries would follow, coupled with the resulting possibility of continuing for some time at least the exercise of a certain control of prices and distribution, thereby causing a more gradual decline. Of the two courses our

first impulses, I believe, would make us choose the latter. Closer study is likely, however, to gain our support for the first of the two methods.

There is much to be said in favor of a quick return to the natural basis. While it must be conceded that unhampered development may temporarily produce a greater shock, we must bear in mind that on the other hand trade and industry are unlikely to proceed at full speed until there prevails a general and confident feeling that a natural solid basis has been reached. What would be gained by governmental assistance to our foreign purchases would be lost, therefore, by the creation of a sentiment of reserve and hesitation caused by the hot-house atmosphere.

Moreover, now that the war is won, we cannot blink the fact that impatience is general to shake off restrictions and bothersome regulations, and there is grave doubt as to whether an effective control of output, distribution and prices could be continued any longer. While the cushioning of the shock might appear very desirable on account of its bearing upon unemployment and wages, the fact must not be overlooked that by the systematic and wise curtailment during the war of expenditures for maintenance and new constructions, for necessities and luxuries, we have now happily stored up a reserve purchasing power which, together with the natural foreign demand, should prove a very efficient shock absorber.

These conditions would not appear to warrant the fear of the imminence of very drastic convulsions in the labor market. But even a temporary jolt should not frighten labor, provided that there results a prompt establishment of a solid basis on which business can develop healthily and freely. Weighing all pros and cons as far as we are able to see them and realizing that requirements may differ in the several branches of industry and trade, it would seem that on the whole the evidence favors an early withdrawal of the hand of government in regulating production and prices.²

The policy indicated by the Treasury of prompt liquidation of government contracts, even though compensation for cancellation

² I am not including the activities of the War Trade Board, whose control, in certain respects, may have to be continued until the free use of shipping facilities will be restored to our trade.

might involve large sums, appears most advisable in the circumstances. Prompt payment by the Treasury of all such obligations would ease very materially the general situation and it would enable industry to clean the slate rapidly and thoroughly and get ready for the new business that knocks at our doors. The above is stated with the greatest possible hesitation by a skipper who knows full well that he is in a fog, but who, having recklessly agreed to discuss this topic, has no choice but to go ahead on the best observations and soundings that he is able to make.

But whether or not our assumptions be correct, in trying to survey the field of our future financing, we may take it for granted that, should our government cease to make advances to our Allies, some of them are most likely to offer for sale in our market their own government bonds or notes, or their industrial properties. I feel certain that vast amounts of the obligations of our strong friends will find a cordial reception here and will be readily absorbed; but taking it all in all it appears extremely doubtful whether our investment houses will find it possible to place foreign securities on a broad enough scale to meet the large foreign requirements for our goods. The task will be made all the more difficult, because, as some of these countries have just passed through a period of unrest and great financial strain, we may expect the investor to insist on some evidence that new political conditions have come to stay and that he may rely on an undisturbed economic development before he risks his money.

On the other hand this period may offer great opportunities for the acquisition of most valuable foreign properties. Some nations, particularly those with strong credit, might possibly prefer sooner or later to dispose of some of their national securities or assets rather than to increase their indebtedness to us by the acceptance of further loans; other countries may have to sell in order to pay their debts because their national credit has been destroyed. From the business point of view it would obviously be to our advantage to buy assets of this sort (or, as the case may be, to make advances secured by such assets with an option to buy them) instead of taking an unsecured long-term foreign government obligation.

It is evident why, in the long run, it is more desirable for the United States to acquire the electric light and power plants,

telegraph and telephone lines, railroads, mines, or other industrial plants, than to advance to others the money with which to carry these properties; for whoever owns and controls these foreign plants is most likely to secure for his nationals the orders for raw material and manufactured article that go with their upkeep and development. Regular orders of this nature have shown themselves to be a most valuable nucleus around which further business crystallizes.

It is estimated that England, France and Germany before the beginning of the war invested annually an aggregate of over a billion dollars in foreign countries. For more than four years countries like the South and Central American republics and China have not been able to secure foreign funds in substantial amounts, and while the war has taught them the necessity for a greater degree of thrift and more extensive reliance upon their own resources, their accumulated appetite for foreign capital must now be large.

Add to that the demands of European nations, new and old, and it will be clear that by sheer force of circumstances, even though England, France, Holland, Japan, the Scandinavian countries and others will take their full share of the burden, we shall soon be driven into a position of great importance in international finance, and that this responsibility will be facing us long before we may expect to see our market for foreign securities develop far enough adequately to meet the situation.

I believe that so-called "investment trusts" will ultimately play an important rôle in solving this problem. Companies of that character are well-known in England, particularly in Scotland. As their name indicates, they invest their funds in foreign securities and against their assets they issue their stocks and bonds for sale in the home market. One important corporation of this description has been launched in the United States, the American International Corporation. More such companies, I think, are bound to be created, but it will take years to establish their prestige and standing all over the country and to prepare for their securities an investment field wide enough to fill our needs.

PLANS FOR A PEACE FINANCE CORPORATION

In these circumstances, it occurred to me some time ago that by converting the War Finance Corporation into a peace finance corporation and authorizing it to acquire directly, or make advances on foreign securities, we might create an instrument that would promote our foreign trade and at the same time greatly assist foreign nations in need of our support during a period of political and economic transition. Such a peace finance corporation, enjoying the prestige and strength flowing from the \$500,000,000 capital subscribed by the United States, could exercise effectively its power, within certain limits and for a limited number of years, to issue its own obligations against the foreign securities acquired.² In doing so it might render services of the very greatest value in bridging a critical interval. At the same time, it would keep the government out of direct touch with business transactions, with which, for a thousand obvious reasons, it had better remain unconnected.

For the sake of both our domestic and our foreign problems, I believe a plan of this kind is deserving of our most careful consideration, even though I am reluctant to suggest it because of my strong belief that at this time we should remove rather than construct war emergency machinery that draws government into business and on account of other serious and valid objections which at once occur to us.

The greatest difficulty, and one that cannot be weighed too conscientiously, is that of devising a plan which will provide a sufficient assurance that we may rely on securing men able, expert and independent enough to be entrusted with the administration of funds amounting to possibly billions of dollars, men who would have to be vested with wide powers in dealing with what, in effect, would amount to the people's money. In order to win the war, and while it lasted, we were willing to concentrate such powers in the hands of a few. Would Congress be prepared to go that far for purposes of reconstruction? That is doubtful, and personally I believe that, in spite of its obvious necessities and advantages, the step, involving as it does transactions with

² These obligations should not be eligible as collateral for notes rediscountable with federal reserve banks. They should be placed only as fast as they can be absorbed by the investors.

foreign countries, could safely be undertaken only if we could remove every reasonable doubt with respect to our ability of securing the proper men and of keeping the corporation's management so separate and distinct from the direct responsibility of the government as to protect both the government and the corporation from any embarrassment likely to result in dealing with foreign nations.

A solution might be found by providing that the peace finance corporation should be administered by a board of directors, of whom one each, with the approval of the President, would be designated by the Secretary of State, the Secretary of the Treasury the Secretary of Commerce, the Federal Reserve Board, the War Industries Board, the War Trade Board, the Shipping Board and the Food Administration (each selecting at the same time a substitute director for their appointee). These directors then would elect the general manager and other officers.

A method of this kind would be likely to secure a non-partisan expert administration: a majority would be appointed by non-partisan expert men of national reputation and of widely divergent interests. I think a board of that kind might safely be entrusted with the necessary wide powers; it would embody all the elements that are at present charged with the duty of regulating commerce and finance, particularly in their relation to foreign countries. In case of vacancies occurring after one or more of the appointing boards had ceased to exist, other boards such as the Federal Trade Commission and the Tariff Board might take their place, or the Board of the Peace Finance Corporation itself might be empowered to submit to the president names of candidates. There may be many better ways of appointing the board; the above method is suggested simply for the purpose of submitting an illustration.

In many foreign countries there are men now on the ground, serving as emissaries of the Department of Commerce, or as representatives of the Treasury, or acting in connection with the business operations of the army and navy or the American relief organizations. Would it not be possible to constitute from men thus available abroad and the best men qualified in the United States, advisory commissions to cover each country, not only in Europe but also in South America and Asia? These men might render invaluable services to a peace finance corporation, and

ultimately they would become important factors in creating in the United States the atmosphere of knowledge and understanding of foreign conditions so important for the development of our future trade and finances. At the same time it will be very desirable to have available in some of these countries groups of men who will keep an eye on the proper distribution of goods furnished by us.

Whatever form of financing, however, the reconstruction period may bring, whether securities issued by our own government, or by a peace finance corporation, or by foreign governments or foreign corporations, it is certain that their successful absorption will depend upon the saving capacity of our people. I believe we cannot emphasize too strongly that the time has not yet come when our people may relax their efforts to curtail unnecessary consumption, both for the sake of releasing for export the greatest possible quantities of goods, thereby stimulating our export industries, and for the purpose of accumulating funds available for investment. The slogan "don't stop saving food" would gain in scope and strength by abbreviating it into "don't stop saving!" Our more than twenty-one million liberty bond holders must be trained to become permanent investors; thrift must become a national virtue, a priceless inheritance left to us by the war. The splendid saving mechanisms now in use should be continued and expanded; they should not be permitted to die out when government borrowing ceases.

It is most important that our coming victory loan be absorbed so far as possible not by bank borrowings, but by genuine savings. Thanks to the strength provided by the Federal Reserve System, our banks have been able to meet the strain of the war in a most admirable way, and, as in every previous loan, they will be found prepared for whatever burden the next loan may bring.

But do not let us be unmindful of the fact that since our entry into the war the reserves of the federal reserve banks have fallen from 85 to about 50 per cent; that the aggregate investments of federal reserve banks have increased in that period from \$225,000,000 to over \$2,300,000,000; and that the proportion of national banks' investments to deposits at present amounts to 130 per cent against 110 per cent at the beginning of the war in 1914.

GOVERNMENT BONDS AND WORLD-WIDE INFLATION

We are near the crest of the wave of world-wide inflation. As it was generated and fostered by a chain of interlocking effects and reactions of extraordinary demands for certain goods, reduced power of production of others, rising prices, rising wages, vast issues of government bonds and circulating notes, so with the approaching end of the issues of government loans we may expect to see the beginning of a gradual contraction of note-issues and deflation of prices and wages⁴ and a return to more normal conditions of production and consumption.

So far as the banking situation is concerned, deflation will have to be brought about primarily by the people's efforts to save and by a contraction of loans following the shrinkage of prices of goods and reduction of the volume of inventories. On November 8, the 751 member banks in leading cities submitting weekly reports to the Federal Reserve Board held \$1,200,000,000 of loans secured by government war obligations in addition to \$1,806,000,000 of government securities (exclusive of \$268,000,000 deposited for the issue of national bank currency), making the total holdings by these reporting member banks of government war obligations and paper secured by such obligations in excess of three billion dollars, of which a substantial proportion was pledged as security for loans obtained from federal reserve banks. On the same date the amount of this class of paper which the federal reserve banks had discounted for their members aggregated \$1,317,000,000.

The government bonds held by the banks ought to be absorbed by the public as fast as possible and the expanded position of both member banks and the federal reserve banks correspondingly lightened. Depositors by turning into investors would reduce our deposit structure, which from the beginning of the war in 1914 has risen from \$21,330,000,000 to about \$32,000,000,000, and thereby decrease the banks' reserve requirements. This in turn would have the effect of reducing the re-discounts made by member banks in order to provide the necessary reserve balances with federal reserve banks.

⁴ Wages control prices and prices control wages; they have to move together. I cannot but believe that Mr. Gompers had in mind in his recent speech the preservation of the relative position of wages; that is, their purchasing power (based upon index numbers or what is spoken of as real wages, as distinct from nominal wages). Any other thought is an impossibility.

While it is possible that the aggregate of investments of the federal reserve banks will still rise in consequence of the payment of the installments due on the fourth liberty loan and the victory loan to be expected in the spring, we must hope that the peak may be reached in the near future and that from then on we may witness a continuous and substantial decline in bank investments and a corresponding rise in the percentage of reserves.

Nothing could be more beneficial to the prestige of the United States as a world power in finance than the early and courageous lifting of the gold embargo. It is true that before contemplating this step, it will probably be necessary to have an ample tonnage at our free disposal for the unhampered transportation of our goods (and other conditions will have to be considered which it would lead too far here to discuss), but it is also true that the stronger our gold reserve at that time, the more readily will we be able to envisage with complacency the probability of the consequent exportation of sums of gold which, conceivably, may amount to hundreds of millions of dollars.

It is for this very important reason that it is sincerely to be hoped that the people by saving and curtailment of unnecessary consumption and expenditures, and that the business community by a program of wise moderation, particularly dealing with non-essentials,—and as long as this can be done without creating unemployment,—will do their share in consolidating both our gold and investment strength, on which two factors, our ability to secure our proper position in foreign lands and our power to act boldly and generously in dealing with other nations, are largely predicated.

Over-expansion of deposits and note-issues must not be permitted to tie up our reserves to such a degree as to interfere with our power to let gold go out freely. While we are still in a position of great strength, we must remain conscious of the necessity of not forgetting our limitations.

If by the exportation of large amounts of gold or a continual increase of investments our Federal Reserve System's cash reserves would fall from 50 to about 40 per cent, that by comparison with other countries would still look like a very high reserve. Do not let us forget, however, that in Europe reserves before the war were considered to be near a normal level at approximately 60

per cent, and that that was at a time when central bank countries were saturated with gold, owing to the hundreds of millions in actual gold carried in the pockets of the people, while now this important secondary reserve has been wiped out in almost all leading countries. They have wisely concentrated that gold in the central banks in order to have it serve as a basis for their vastly increased note and deposit obligations. Logically, future central banks' reserve standards ought, therefore, to be higher than those of the past. While we must resign ourselves to the conclusion that it will be a "long, long way" to the realization of any such hope, it is all the more evident how important it is for all countries firmly to envisage this goal of strengthening their present financial position by a gradual deflation, and continued efforts to concentrate all scattered gold.

The world balance sheet has been "watered" by issuing war loans and currency, against things already consumed or of no permanent value, to an aggregate appraised to exceed the estimated pre-war wealth of England and Germany combined. The squeezing out of this water by gradual amortization of war loans and contraction of note issues will prove an important factor in reestablishing pre-war levels of prices.

Some writers hold to the view that increased production of goods rather than banking deflation may bring us back to a normal relation between money and goods. My own belief is that the solution must be sought in efforts from both ends. The resultant line indicating the trend of prices and deflation would then lie somewhere around midway between the highest and lowest points.

Perhaps I should say a word at this juncture concerning the much mooted question of the demonetization of gold as a world medium of exchange. In considering the suggestions made in this connection I have to think of the deaf old lady who, when asked by her table neighbor whether she liked red bananas, answered: "No, my dear, I prefer the old-fashioned night shirt." I confess, when dealing with this problem, that I, too, am old-fashioned. I believe that gold as a medium of actual circulation within the border lines of countries will more and more be relegated to the past; but that as a basis for an elastic circulation and as the ultimate means of settlement of international balances, it will continue to dominate the world. It will not be dethroned for

the reason, if for no other, that such a step could only be taken by mutual agreement between gold debtor and gold creditor. The position of economic superiority held by a creditor country owning a large stock of gold is, however, of so immense an advantage that it will not be voluntarily relinquished by the large number of nations that are the *beati possidentes*.

Nor do I believe that the world has turned far enough into a family of communists seriously to consider the pooling by all countries of their holdings of gold. As long as nations have separate national budgets and obligations, they are likely to wish to retain a distinct ownership of their assets. The problems of reconstruction are immense and immediate; the new structure must be erected on the most solid foundation and built with material that is thoroughly tested and promptly and actually available.

Nor can we deal effectively with the foreign exchange question without first freeing our minds from doubtful theories. We must cling to the old dogma, that foreign exchange will continue to be the result of the foreign trade and credit of each individual nation, the balance, so far as not squared by the flow of goods and loans and securities (including bills of exchange) or bank balances, remaining to be settled in gold. The war, drastically obstructing all these natural currents, brought violent and most regrettable disturbances to the foreign exchange markets. But we have seen that the very approach of the armistice, promising the return of normal trade conditions, turned back our exchange rates towards their fairly normal level.

I do not believe, therefore, that there is any necessity for the establishment by the government of a foreign exchange bank, which has been urged as a reconstruction measure, for the purpose of keeping dollar exchange at par, or our discount rate for bankers' acceptances at $3\frac{1}{2}$ per cent, or for providing the country with adequate foreign exchange and credit facilities at fair and equitable rates. If it should be shown that American banks and bankers are so lacking in spirit of enterprise that our business men, at fair rates of compensation, cannot secure adequate facilities for the carrying on of their foreign transactions, then such banks should be organized.

In that case, however, it should not be a note-issuing bank,

but a plain and unhampered business organization under government control. So far nothing has changed my knowledge and conviction that the foreign exchange business in times of peace is being transacted on the most modest margin of profits, that our American banks, since the shackles were taken off them four years ago,⁵ have moved rapidly into foreign fields and that they may be relied upon to do their share in the future.

Attention has been drawn to the preliminary steps taken by many European nations for the organization of banks designed to protect the foreign exchanges of their respective countries. But the conditions of these nations are not ours. Countries that are dependent upon the importation of goods and at the same time have to find means of annually remitting abroad large sums in payment of interest and amortization have a very real and serious problem on their hands, one from which, happily, we have reasons to hope to be immune, at least for some years to come.

With the vast credit balance annually accumulating in our favor, adverse exchange conditions, barring unforeseen emergencies, can normally be brought about only by excessive foreign investments and these can be adjusted by a modification of our financial policy at home, but not by the operation of a foreign exchange bank. Nor would it have been within the power of such a foreign exchange bank to stabilize our dollar exchange during the war.

It is now well understood that apart from the interruption of our trade with neutrals, the prevailing and regrettable disturbance in our neutral exchanges was largely a question of the use of the proceeds of our loans granted to our Allies, and of other "force majeure" influences which it would lead too far to enter into, but which would have been beyond the power of such a bank to regulate. As stated before, when the seas are open to our unhampered trade and when our foreign loans are under proper control, with our huge gold stock and an effective discount market, our foreign exchange situation can be protected without the creation of a new government bank.

Nor is such a bank necessary in order to put our discount rates

⁵ It was only two years ago that the power was granted to national banks to combine in holding stock in banks organized to do foreign business. The national charter for such foreign banks has not yet been granted, in spite of the urgent and persistent representations of the Federal Reserve Board.

on an equal level with those of London. It cannot be denied that it is an anomaly, which rankles in the minds of some of our critics, that our acceptance discount rate should at present be at $4\frac{1}{2}$ per cent, while the British rate is at $3\frac{1}{2}$ per cent at a time when England is borrowing from us at a rate well in excess of $4\frac{1}{2}$ per cent.

So long, however, as the United States Treasury has to raise about one and a half billions per month by the sale of Treasury certificates at $4\frac{1}{2}$ per cent, it is evident that a reduction by the federal reserve banks of their discount rate to $3\frac{1}{2}$ per cent would only have the effect of inducing the banks and trust companies to sell all their acceptances to the federal reserve banks at that rate, in order to buy Treasury certificates at $4\frac{1}{2}$ per cent, or commercial paper at 6 per cent.

In other words, it would tend to encourage expansion and at the same time destroy the broad market for acceptances which, as a result of the labor of several years, has been developed, with a constantly growing number of banks purchasing these acceptances. The low rate, if adopted, would be likely to make the federal reserve banks the only market. If, on the other hand, the Treasury reduced its rate on certificates to $3\frac{1}{2}$ per cent it would court certain failure in its attempt to raise the vast amounts required each month.

As against these conditions, it may be taken as a fact that the low acceptance rate established in England proved of a very real value to our Ally on account of its bearing upon the British Government's gigantic and highly successful loan operations in the home market. Must we not ask ourselves whether that was not a sufficient compensation for the temporary disadvantage at which we were placed? Was not the common object to be gained more important than the question of the relative position of vantage between allies?

As stated before, we may expect that anomalies of this kind will cease as soon as Treasuries discontinue to issue government loans and when the natural flow of money again dictates the rate policy of the countries under the leadership of their central banks. It cannot take long for a natural adjustment to take place on these lines and we can well afford to be patient in the interval, whether it extends over half a year or even a little longer, during this transition period of reconstruction.

Was it not the redeeming feature of the horrors through which we were passing that for a common aim men were willing to share with one another suffering, deprivation and death? And is it not one of the most inspiring features of reconstruction that a spirit of competition in giving and sharing with one another has come to us to take the place of the one-time spirit of keen competition for possession and position?

IS THE UNITED STATES TO BE THE LEADING FINANCIAL COUNTRY?

In thinking of financial reconstruction and of the financial world of the future, do not too many amongst us have this one thought uppermost in our minds: is the United States hereafter going to be the leading financial country? In other words, are we going to take England's place as the foremost financial power? Do not these men forget that if England were to surrender her entire trade and banking to us we should collapse, and that if we were to unload all our business on her, she would break down under the burden?

The whole truth of the matter is that we have both grown to be pillars supporting the same structure and that neither can fall or become weakened without bringing danger or disaster on the other. England, herself the owner of billions of foreign obligations, will remain the banking center of Europe, a world clearing house for goods and credits. I believe that her banks and ours will be found in close coöperation, sharing the burdens in bond issues and credits, and relieving each other as the tide may swing from time to time.

Personally, I think it is finer and healthier for us not to think so much of the rank as of the responsibility of our position. Amongst nations, as amongst men, it is not prudent to place one's self on a pedestal overlooking the rest. Whoever rises too far above his neighbors ultimately makes himself their target.

Moreover, conditions of too glaring advantage do not remain long without the disproportion being adjusted in one way or another. An over-abundance of capital and material on our part will soon draw towards our shores as an equalizing force a stream of men anxious to divide with us our position of advantage, and surplus capital flowing into poorer countries will help them to develop their own resources. The ultimate course of the process

of adjustment will largely be influenced by the attitude and power of labor, and our future tariff policy.

If I read aright the signs of the times, England and the United States, soon to be joined by France, allies of the past, will be partners rather than competitors in the future—partners not of a close corporation to the exclusion of others: it will be a partnership wide open for any respectable new associate wishing to enter. Or perhaps we might more properly term them joint trustees, with others, administering a great public trust. If there is to be immediate and intense competition between their peoples, it ought to be on this one and only ground: "Who will be able to save most in order to be able to help most."

The ownership of no less than \$8,000,000,000 of foreign government obligations (probably billions more before we are quite through) conveys to the government of the United States the possession of a master key controlling the foreign exchange market for some years to come.

Nobody is wise enough to say today what the ultimate disposition of these foreign bond holdings will be. Some bonds may be actually paid off when due; others may have to be renewed by our government; in other cases foreign governments, when their bonds mature, as a renewal operation may offer their own bonds for sale to the American investor (instead of to our government).

We may assume, however, with entire confidence, that the United States is not going to be a hard and exacting creditor. While our government may find that, as a matter of protection against unexpected economic or political developments, it may be advisable to keep a certain portion of our foreign loans in bonds of a reasonably short maturity, renewable from time to time, there cannot be any doubt that the decisions of any future administration concerning the ultimate liquidation or continuation of these debts will not be reached from mercenary or selfish motives, but that they will spring from considerations of the larger duties towards the world as a whole, and from minds fresh with the memories of the sacred purposes for which these obligations were incurred.

It would unduly tax your patience to give a complete list of the things in which I do not believe, but it may not be inopportune for me to digress here for a moment in order to express the hope

that Congress may see its way clear to exempt from taxation the interest received by foreigners on bank deposits in the United States, or on their investments in loans, discounts or American bills of exchange. Other countries, *e.g.*, England, have imposed taxes on income received by foreigners on permanent investments; but England has never undertaken to tax foreigners on revenues from sources of income which do not constitute permanent investment. England, not only commercially but also financially, is a free trading country, and it is largely to her liberal attitude in this respect that she owes her position as the world's banker.

Petty and vexatious taxation of revenues from bank balances and bills of exchange will result in placing a severe handicap upon American banks in their efforts to give to American paper and American balances the same standing as that enjoyed by their British brethren. Such taxation not only impedes the free flow of money but in the final analysis hurts the American borrower, who will be the one to "pay the piper" by being compelled to stand the higher interest charges which would result. I should earnestly urge, therefore, that Congress examine this question very seriously when framing the revenue bill now under consideration.

Just as I was finishing the writing of this article, there came to my knowledge an abstract of the report of the British Committee appointed to investigate the question of currency and foreign exchange after the war, of which Lord Cunliffe, the esteemed ex-Governor of the Bank of England, is the chairman. It was extremely gratifying to find that the conclusions reached by this committee bear out entirely the thoughts that I have ventured to express in this paper with regard to Treasury borrowings, discount rates and deflation.

The report urges as prerequisites for the restoration of an effective gold standard, "which should be restored without delay":

The cessation of government borrowing as soon as possible after the war, and the provision at the earliest possible moment of an adequate sinking fund for the purpose of bringing about a regular annual reduction of capital liabilities;

A cautious reduction of the outstanding uncovered note issue and a greater concentration and strengthening of the gold reserve;

And, furthermore, the bringing into effect of the "machinery, which long experience has shown to be the only effective remedy for an adverse balance of trade

and an undue growth of credit." This machinery is defined as "the raising and making effective of the Bank of England's discount rate, which before the war operated to check a foreign drain of gold and the speculative expansion of credit." "This necessity," the report says, "cannot, and should not, be evaded by any attempt to continue differential rates for home and foreign money after the war."

Lord Cunliffe's sound advice to let business return as soon as possible into its old and tried channels will no doubt be heartily acclaimed by our business men and bankers.

Under the able leadership of the Secretary of the Treasury—in whose retirement we regretfully lose a courageous and efficient general, deserving of the country's deep gratitude,—our task of war financing has been most brilliantly performed. The Federal Reserve System, now unfolded to a position of power and influence far beyond the early expectations of its very proponents, and the banks of the country, placed through it upon a new basis of safety and of wider scope of operation, will show themselves physically and intellectually equipped for their larger tasks whenever the moment comes for the Treasury safely and properly to return to a peace footing in the exercise of its own functions.

May I avail myself of this opportunity to state that I believe the country is to be sincerely congratulated upon Hon. Carter Glass's appointment as our next Secretary of the Treasury. Nobody has done more in formulating and passing the Federal Reserve Act than he. Nobody has rendered greater services than he in keeping out of harm's way the schemers and dreamers that might have endangered or wrecked our banking structure. The country is deeply indebted to him today, and I am certain that as Secretary of the Treasury he will add further distinction to his record of public service. Through five years of intimate association, I have grown to know and sincerely admire this unassuming and unselfish man as one of our finest citizens and as a fearless fighter sacrificing himself without stint or reserve for whatever

*The report is significant, furthermore, in its unqualified recommendation that "the gold reserves of the country should be held by one central institution and that all banks should transfer any gold now held by them to the Bank of England." That is exactly the policy the Federal Reserve Board persistently urged upon Congress, a policy fortunately adopted and since enacted into law. Without such amendment it would have been impossible for the Federal Reserve System to accumulate the more than \$2,000,000,000 of gold which enabled it successfully to stand the unprecedented strain of financing the war.

he deemed to be best for the country. I consider it a privilege to be permitted to pay him this tribute.

As military victory could not be won without the loss of lives, so financial victory could not be secured without economic sacrifices, not only of a material character, but also of principles which normally we hold dear. Inflation of prices and temporary surrender of individual freedom of operation are cases in point. Success having been achieved, we now are starting to wend our way back. We have fairly well reached the top of the mountain: we do not exactly know whether it is a peak or a high plateau. The transition period will keep us moving over it, and then gradually, as we ascended, we shall have to descend through the period of reconstruction, until we reach the normal level of the future.

Happily, in the case of finance, the course of our path lies fairly clearly ahead of us, because the relations between government and business had been defined by the Federal Reserve Act on a modern and satisfactory basis before the war broke out. In banking, the formula for private operation under government control had been found and put into effect. Conditions are not so clear with respect to other and similar problems, such, *e.g.*, as the railroads, the financing of which forms a part of our program, which it would lead too far here to discuss. This only we might say in conclusion:

The war has accentuated and vastly accelerated the growth of government responsibility and influence in business. This development is world-wide at this time, it is natural, logical and inevitable. While it will tend to elevate business, there is danger that unless carefully safeguarded in both form and scope, it may tend to corrupt and to debauch government. It is this peril that we are facing at the moment of our proudest triumph, and it must be our serious concern that a national effort born in idealism should not bear the seeds of ultimate national decline. The reconstruction period places us face to face with this problem and it is during this period that thoughts will have to be developed leading to a solution entirely fair to the people.

In the case of the railroads, it is not solely a question between security holders and shippers; it is a question which affects on the one hand the integrity and safety of our future political life, on the

other the very foundation of our economic development. The next year or two must bring forth legislation which ought to be for the railroads what the Federal Reserve Act has been for the banks. To find the proper formula will be a national contribution of the highest order. It will be a difficult task, but just for that reason one worthy of the efforts of the best minds of the country. It is not solely a question of railroad technique or finance. A larger problem is involved, one that will face us at every future step in the evolution of the relation between government and private enterprise, the problem of finding men big, trustworthy, expert and independent enough to measure up to the task, and to make the task independent, clean, non-partisan and dignified enough to measure up to the men.

Until that phase of the problem is solved, government regulation or operation in times of peace will remain imperfect and fraught with dangers threatening to outweigh its benefits. No time ever was more propitious than the present for making a determined start in this direction.

The reconstruction period is pregnant with the seeds of good or evil; what it brings forth will depend upon the care and devotion that the country gives to its problems. It is a period, as its name indicates, for constructive thought, not for destructive criticism. If the flower of our manhood is willing to serve the country during reconstruction and peace as it did in times of war, and if the country's new and larger duties, and its higher conceptions of them have taught it to want as its servants none but the truly best, then we may look into the future with hope and confidence that we may prove ourselves competent and faithful guardians of the sacred trust which this glorious period has placed into our hands.

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Economic Internationalism

By E. M. PATTERSON, PH.D.

University of Pennsylvania, Philadelphia, Pa.

MUCH is heard today of internationalism, both political and economic. The proposed league of nations, the growing interdependence of peoples in different parts of the world and the need for better understanding and more complete agreement are all brought to our attention in private discussion, on platform, and by the press. At the same time much is said of the necessity for better trade organization, of commercial rivalry and of the plans here and elsewhere to conquer foreign markets. This article undertakes an analysis of these apparent contradictions.

In the past the economic organization of the world has been largely local or at the most national. To be sure, theoretical writers have argued for internationalism. The importance of free interchange of goods, of the removal of all trade barriers and of the economic brotherhood of man have been set forth at length. In England and in the United States particularly have writers on economic theory been internationalists. In Germany List's "National System of Political Economy" introduced an opposing view which, with modifications, has been accepted by most of his countrymen both in principle and in practice, but even with List economic nationalism was merely a preliminary step toward internationalism. Progress for all countries was in his judgment toward freedom of trade, of the sort even then adopted by England because her industrial development justified it.

THE DOMINANCE OF NATIONALISM

Yet practice has been curiously and persistently at variance with the theories of internationalism. England is the only country that is avowedly free-trade, the other countries of the world having protective tariffs. This may have been very unwise and very short-sighted but such has been their policy. Moreover, England herself has been international in her conduct only or chiefly in her tariff. In many particulars she has been intensely nationalistic and has actually set an example to the world in some

of them. It was Lord Palmerston who established a precedent for modern "dollar diplomacy" when he utilized English naval forces to compel Greece to pay interest on some of her bonds owned by a subject of Great Britain. This example has been followed by other governments until today it is a frequent practice. English trade also is a matter of national pride and is to be developed not so much in coöperation as in rivalry with other countries.

Nationalism seems to be dominant in the economic life of the world. Those who argue against it and in favor of internationalism have a twofold task. First, they must show that there now exists an economic organization or machinery that makes internationalism desirable or possible, or perhaps even imperative. Second, these facts must be presented so clearly, so convincingly and so emphatically that there will rapidly appear among us a new conception. A large part of the task is to adjust our thinking and our terminology to the modified situation.

Some of the changes that have occurred are well understood. The growth of the large corporation, the increasing part played by capital and the significance of modern rapid communication and transportation are illustrations. Here are changes great in extent and influence. Their size is impressive, their activities are prominently before us and their influence on our lives is daily noticeable. Yet much of our reaction is merely a vague impression and not a full appreciation of what has occurred. A brief summary will be profitable.

Prior to the Industrial Revolution methods of agriculture were relatively crude. In England the land was still in the hands of small holders. In France a considerable proportion of the peasants were landholders but cultivation was hampered by many restraints both of law and of custom. Germany was still more agricultural than France but her methods were antiquated. In Germany industry was strongly under the influence of the gild. The same was true but to a less degree in France while in England the domestic system prevailed. Foreign commerce was very limited. That of France was small in volume, chiefly European and in fancy goods. England's was relatively large, was in staples and growing rapidly. Germany's commercial relations with the outside world were unimportant.

Then came the Industrial Revolution. To European agricul-

ture it meant heavier investments with an improved machinery and a new technique.⁷ Manufacturing in all countries witnessed the rise of the factory system, the increasing significance of iron and coal and the shifting of population from country to town. A gulf developed between employer and employe, the condition of the laborers, especially that of women and children, became deplorable. A larger product was secured under the new methods but a considerable fraction of it was sent abroad and the conditions of the European factory workers was worse than that of their fathers and grandfathers.

Transportation and communication also underwent great changes. Highways and canals grew in number, in size and in quality. Steam power was introduced and after a time the telegraph and the telephone. Trade flourished, the desire to control sources of raw materials and markets increased and opportunities for international rivalry and friction multiplied.

CAUSES OF ECONOMIC FRICTION

The economic competition which ensued was intense and probably inevitable. During the nineteenth century the changes that have been so briefly summarized swept over not one country but all of western Europe, while in the United States also modern methods were rapidly adopted. Instead of exploiting widely separated countries the rival commercial and industrial interests were brought into close contact. In Africa, in Asia and elsewhere representatives of different nations, finally including the United States, sought to push their own interests in opposition to those of their rivals.

This closer contact was enough in itself to produce friction but the difficulties were increased because of the large amounts of capital involved. Investments in land, in factories, in machinery and in transportation grew to enormous sums and gave intensity and momentum to the movement. While ownership was somewhat distributed there was still much concentration and under the changed conditions, control as distinct from ownership, centered in a relatively few hands. In London, Berlin, Paris, Vienna and New York much power and responsibility rested among a few small groups.

Another change appeared as the result of the corporate form of

organization. The owners of a given property (i.e., the stockholders and bondholders) are not usually the managers, and are concerned primarily with the regular receipt of dividends and interest. They do not often inquire too closely into policies and methods but ordinarily protest with vigor if their income is small or irregular in appearance. Officers and directors are under a greater pressure to make profits than we sometimes realize. Often a choice must be made between adopting questionable policies and methods and facing the relentless indignation of security holders.

IMPORTANCE OF UNINTERRUPTED OPERATION

Attention should also be paid to the importance of uninterrupted operation in modern business. Irregularity means periods of unemployment or part-time work with resultant discontent, unrest and perhaps violence. Fully as important to the employer is the relentless pressure of "overhead expenses." His outlay is of two sorts. The first is for items that fluctuate with the volume of business done. Cost of raw materials and freight charges are illustrations of expenses that are greater when the volume of business is large than when it is small.

On the other hand, some expenditures must continue with little reference to the output of a given year. Interest on bonds, insurance premiums, much of the depreciation on equipment and the salaries and wages of a considerable staff of employees must be kept up even though business is dull. In many plants these "overhead" expenses are larger than the variable ones.

Heavy "overhead" is largely due to the great amount of capital employed and has become increasingly significant in recent years as larger and larger plants are built. Continuous operation must be arranged for. Even temporary cessation means disorganization, a scattering of employees, a continuance of 50 per cent or more of expenses, and perhaps bankruptcy, while resumption after such an experience is extremely difficult. But continuity of operation necessitates a steady and large supply of raw materials, some of which perhaps come from abroad, and control over their sources becomes advantageous. A regular market for the sale of finished products is equally important. The home market can be secured in whole or in part by protective tariffs but foreign markets must be acquired and held in other ways. Greed for exorbitant gains

may draw many on, but relentless pressure to keep the great machine going explains much of the intensity of competition for colonies and for markets.

This is a very fundamental fact in our economic structure which goes far to explain the economic conflict between different countries. Large scale production by modern methods means a heavy capital investment. This involves large overhead expenses and makes any interruption of operations dangerous, the result being an acute rivalry for raw materials and markets. There should be added yet another fact. With the shift of population from country to town and the consequent decline in agriculture (especially noticeable in England) foodstuffs must be imported from the outside and control of the sources of their supply becomes important.

The forms in which this competition appears are familiar. Tariff wars, struggles for concessions, spheres of influence and peaceful penetration are among the most important, to which should be added the rivalries in international financing. The privilege of lending to a foreign country on the basis of securities to be resold to the general public at home is valuable. Moreover, such loans often carry with them the condition that orders for certain specified supplies shall be placed in the country whose bankers underwrite the loans.

OUTCOME OF INTENSE COMPETITION

The effects of the ensuing struggle are of two sorts. One is to bring the rivals to see the folly and the dangers of continuing the competition. Within the United States this result has long been apparent. Years ago our railroads realized that cutthroat competition meant bankruptcy. They abandoned it for pooling and when pools were made illegal other forms of association and of consolidation were devised. In recent years they have competed in service rendered but not in rates. The disasters of competition between such large enterprises has been recognized. In the international field there are many illustrations of the same tendency. Competition is disastrous and international organizations in banking, transportation and manufacturing follow. Coöperation between units formerly competitive prevents the disasters that might otherwise follow.

Consolidations may occur but the outcome is sometimes different, for competitors do not always compose their disputes. Instead of agreeing on some plan for coöperating they may prefer to continue the struggle to their own injury and often to the great loss of the public. This is constantly occurring in many industries, a good illustration being the retail grocery business where failures are numerous. If the field of competition is of international interest each competitor may appeal to his government and to his fellow citizens for their moral or material support. Feeling may develop which will result in open conflict of which illustrations are numerous. Rival claims in South Africa, English and French eagerness to control the Upper Nile, French and German friction in Morocco and Russian and English desire for supremacy in Persia are a sufficient list for the purpose. Dispute over the route of the Bagdad Railway or the control of an important seaport may bring great states to open warfare.

It may be argued that the conditions described are those of a past epoch. This may be true, but there are grounds for doubt. The war has not diminished the importance of large scale production but increased it. To meet the demands of war many plants have been enlarged, machinery has taken the place of labor and output has been standardized. Production in many lines is possible on a larger scale than ever with a capital investment greater than in the past. Pressure to keep an industry going will increase rather than diminish, for even more will be lost if the plant stops.

Still another change has occurred. Government control and operation of industry have grown rapidly to meet the war need and some of this new power will not be readily nor quickly surrendered. Railroad and telegraph and telephone companies may not be returned at once to private control and the influence of governmental bodies over price, quality and market conditions will remain for a time.

A DISCOURAGING OUTLOOK

With these two facts as stated what will be the outcome? Larger aggregations of capital are in existence than ever before. There is governmental organization for controlling and directing this industrial machinery to any desired end and we face the probability that the entire economic life of a country will be adjusted

for a conflict with that of rivals in the world's markets. No longer will there be a struggle of merchants in Berlin against merchants in Paris, manufacturers of the United States against those of England, bankers of Paris against those of London. All of the economic resources of Germany will be coördinated and pitted against those of her competitors who in turn will have similarly organized against Germany and against each other.

In the past Germany has carried this idea farther than her rivals and she will probably continue her old methods. But the example she has set is being imitated elsewhere as is clearly shown in the books and articles that are appearing on all hands.¹ In our own country combinations for export trade have been legalized, banks may coöperate in the establishment of foreign branches, subsidies are being asked and other measures are being taken to coördinate all of our efforts for the capture of foreign markets. In England, the home of individualism and the stronghold of *laissez faire*, is to be found the same tendency.

The picture is a dark one. Whole countries organized against each other possess a power and acquire a momentum that add to the dangers inherent in a commercial conflict. Subsidies may be given, "key" industries recognized and protected, one line of business, e.g., banking abroad, may be conducted at slight gain or even at a loss for the sake of profits received from an export trade encouraged by the banks, in fact all profits might be sacrificed for a time for political or other ends.

If this were merely a vision of the possibilities in a distant future, it would be of academic interest but no more. Instead it is a fact confronting us in the immediate present. If we drift, our solutions may be worked out with little conscious guidance from anyone, but probably not. Instead we may drift into another conflict even more serious than the one just ended. Nationalism was intensified during the war and has even grown during the discussion of the terms of peace.

"PROTECTION" MUST BE DEFINED ANEW

This tendency to unify the economic life of each country introduces modifications of thought and policy in many directions. Protection is no longer a matter of import duties on certain

¹ See, for example, the articles in this volume by Messrs. Colver and Lippincott.

specified commodities. In the words of Grunzel it is "neither more nor less than the sum total of the measures adopted by the national-economy unit for the purpose of advancing its interests in the field of world economy." Control is exercised over the importation and exportation of commodities, over the movement of capital into and out of a country and even the emigration and immigration of peoples is subjected to strict supervision.

Reference was made above to the ways in which the problem has been handled within each country. Competitors may get together thus ending the losses due to reckless underselling or they may continue their rivalry with disastrous results to the public as well as to themselves. If the first plan is followed there develops a twofold danger. Business is conducted primarily for profit, product being merely a means to that end. A combination of competitors may acquire a monopolistic control and utilize it to raise prices. This places on the community a financial burden that may be unduly heavy but would not be so serious if it were not necessarily accompanied by a restriction of output. In order to maintain prices at a higher level production is curtailed and we must content ourselves with (1) a smaller volume of goods which are (2) sold at a higher price.

In order to minimize these difficulties we have imposed numerous restraints upon monopolies. One is to prevent their formation or to dissolve them after they are organized, a procedure which has met with rather indifferent success. The other plan, also far from successful though much better, has been to recognize the monopoly or even to encourage it but to dictate the price and other conditions under which its commodity or service must be furnished to the public. This policy has been applied especially to the group referred to as public utilities.

COMPETITION VERSUS COÖPERATION

Another way of describing the tendency is to say that competition is gradually yielding to coöperation. In our personal relations we still compete but, after all, our coöperation is of far more importance. Even a casual survey of one's relations with his fellows shows how much he is dependent upon them and their activities. He still competes with them or with some of them but in a relatively limited field. The same is increasingly true of

our domestic relations in general. One corporation depends on many others, each industry can operate successfully only if others do the same, one part of our economic life functions to best advantage when the others do likewise. Interests that are common are after all more numerous than interests that are divergent or antagonistic.

Against the dangers that arise we may endeavor to guard by still more complete coöperation, utilizing our governmental organization to assist us in getting satisfactory results. The fact that the results attained are so imperfect does not demonstrate that they are not better than would prevail if there were no such arrangement. Is it too much to hope that this coöperation may be increased within each country and extended more fully in the international field? What is the outlook?

First it may be observed that many competing corporations have already recognized that the accident of their location under different governmental authority is by no means the final consideration. Working agreements, holding companies and other devices for unified effort abound. International combination is in some industries an accomplished fact and will spread rapidly. Probably its extension would be still more rapid and certain were it not for the intensity of our nationalism. The belief in the common interests of the individuals residing within a given geographical area is very persistent and deep seated. All of the advantages that inhere in such a conception need not prevent our recognition of its tendency to retard international consolidations.

Yet if our transportation companies, industrial establishments and banks come together in an attempt to control the world market they may become a universal menace. "Trusts" within a given country may curtail output and raise prices or in other ways prove injurious and such practices may presumably be employed in the broader world field. Against such a contingency the only protection seems to be international coöperation of some kind, presumably to be secured best through a League of Nations.

The second possibility in the international field has already been suggested. Instead of private working agreements or consolidations of companies in different countries, there may be developed a close organization of all industries in each country with governmental coöperation and supervision for the purpose of

vigorous and probably ruthless competition. The driving force of such combinations would be enormous. They would acquire such a momentum and become so reckless of consequences as to make war inevitable. Either international "trusts" or a scramble for trade by competing nations will be dangerous. Neither would be a solution of our difficulties nor furnish us the internationalism that is needed.

In the light of past experience and present tendencies it may be observed that the task of internationalism is complex. The advantages of large scale production, of the corporate form of organization and of the extensive use of machinery rather than human labor must be retained. There must not ensue a scramble for profits that will precipitate another war nor must international trusts be permitted to curtail output or to charge excessive prices. To forecast the forms of organization or of agreement necessary to attain these ends involves more prophetic vision than the writer possesses, but some of the factors that will help or retard the movement may be indicated.

FORCES OPPOSING INTERNATIONALISM

Influences operating against the development of economic internationalism are strong and persistent. One is the fact that business is conducted primarily for profit. Product is of importance to the individual only as it contributes to that end. So general is this that one is apt to overlook its significance. Concern for profit leads each of us to adjust his business in such way as to secure the largest number of dollars for himself. This may be accomplished by means of a large output of wheat, cotton or shoes thus furnishing the community with more commodities. On the other hand, more money may often be made by driving out a competitor with methods that may not add to the volume of goods produced but may even give to the community less product and poorer service than before. Or if control of the market is sufficient it may be profitable to destroy commodities or plan to curtail future production. The smaller volume of output may sell for so much more per unit as to yield a greater return.

This idea is firmly entrenched and permeates most of our thinking on economic questions. Profit, even at the expense of product, is so obviously advantageous to separate enterprises that one

readily assumes that the same policy if pursued by all will result in a general gain. That it does not have such a result does not call for elaboration nor is it necessary to dwell at length on the fact that the exaltation of profit even with a loss of product is not a view peculiar to trust magnates and captains of industry. All of us are influenced by it and struggle more or less vigorously to secure and retain monopolistic advantages. Apparently the view will yield only under pressure from some strong counteracting influence.

Business primarily for profit rather than for product appeals the more strongly because our interests as consumers are so diffused. A small cotton crop means a higher price for cotton than if the crop were large but after all only a small fraction of one's income is spent for cotton and it is pleasant to think of large profits for cotton producers, even though they may have deliberately curtailed output. We hold the same view with reference to all of the other articles we consume, finding it difficult to develop enough interest in any one direction to protest against the loss.

This attitude toward profits affects not only domestic enterprises but international affairs. A large and properly diversified product is by all odds the result to be desired but the longing for profits predisposes us to favor those plans and policies which seem to contribute most immediately and directly to that end. Profits from foreign trade in steel, in meat and in grain are sought and approved with little or no reference to the more important considerations for all concerned, viz., the volume, character and destination of the commodities. The output may be small, the price high, the gains secured by foreigners or by a limited group in one's own country but the magic of the word "profits" quiets all discussion.

A curious result of this viewpoint is found in our thoughtless approval of an excess of merchandise exports, a so-called "favorable" balance of trade. Ordinarily approval is given to such a balance with but little thought of its significance. One reason is presumably the effect of the word "favorable" on one's thinking. It suggests something that should be desired and is to be approved, thereby giving an important illustration of "begging the question." That the expression is merely carried over from a time several hundred years ago when an excess of merchandise exports and an

importation of gold and silver was of real advantage, is usually overlooked. That for some countries, at some times, an import balance of merchandize is the better; that any country which exports its capital is to that extent limiting the amount of possible investment in its domestic industries; or even that an export balance of merchandise for every country is an impossibility, seldom occurs to us. An export balance for the United States at all times is assumed to be the best and any intimation to the contrary or a suggestion that the matter be argued on its merits, is met with discouragement.

Attention may also be called to the belief in national self-sufficiency as an ideal and in the superiority of one's own national customs and institutions over others.² These beliefs lead at once to the advocacy of heavy protective tariffs; to plans for "imperial preference"; to the encouragement of manufacturing goods at home regardless of cost; and to a determination that any and all products of one's own country must be pushed with vigor in other lands. Governments are so impressed with this view that they exert themselves most vigorously to assist.³

INFLUENCES FAVORING INTERNATIONALISM

These influences are by no means the only ones but suggest the observation that much of the task is that of changing our way of viewing many economic matters, of becoming more willing to face facts and analyze problems on their merits. So difficult does this seem and so much of a revolution in our thinking is implied that it is well to point out at once some of the changes that have taken place. Progress is already being made.

First is the fact that the economic interdependence of the countries of the world is today more fully realized than ever before.⁴ The war has shown the wonderful possibilities of coöperation, both military and economic. Much has been accomplished by assigning to each country the work for which it was best suited by location and resources. In the division of duties much devolved upon the

² The article in this volume by Dr. J. R. Smith (p. 86) clearly presents the significance of this observation.

³ Mr. Schmeckebier in this volume outlines this work as it is being done at present by our own government.

⁴ For an interesting analysis of this the reader is referred to the article by Mr. Grosvenor Jones in this volume.

United States because of its location and the scarcity of shipping. Some of the conditions have changed but the significance of the lesson will remain and perhaps also some of the actual organization by which the results were secured during the war.

A second factor is the actual existence of an international organization in many industries. Foreign selling agencies and branch banks abroad are illustrations. Even the financial disorganization prevailing in a country like Mexico can best be remedied by a recognition of the importance to her creditors of her economic development along natural lines.⁴ What is true of Mexico is presumably true of Russia and other countries and signs are not wanting that business leaders in the United States and England particularly are aware of it.

A third factor is the organization of consumers. Producers' organizations have been the rule but in addition to their numerous advantages they have tended to keep attention concentrated on profit. Consumers are more concerned with product and with product at the lowest practicable price. Consumers' leagues and coöperative societies will help us in shifting the emphasis.

As an offset to the enormous growth in the power of centralized government there is to be observed a decentralizing movement. Prior to the war active discussion of this was under way in France. Many of our economic interests are national in significance and in organization and can be dealt with satisfactorily only by a strong central government. Others, however, are more local in importance and cannot be so well handled by a federal or imperial authority. Indications of the reaction are to be found in the demands for more autonomy by Ireland, Egypt and India within the British Empire; in the movement just mentioned for a less centralized organization in France; and in the growing demand for more home rule among the cities of the United States. Attention is being attracted also to the way in which the local authorities in Germany have handled many serious emergencies since the signing of the armistice and much may perhaps be learned also from the operation of the Russian Soviets when their activities can be more accurately and impartially studied.

⁴ For an elaboration of this, see the article p. 130 by Mr. E. D. Trowbridge.

THE INDUSTRIAL UNREST

This survey is already sufficiently long, but reference must be made to the current proletarian movement, to the phenomenon of industrial unrest. It has appeared in different forms and an unbiased opinion of its details is still impossible. Nevertheless, one may already hazard a few observations regarding its significance and its results.

First, it seems clear that as a result of it the workers are to be given a larger share than before in the operation and control of their industries. The Soviets of Russia, Hungary and Germany and industrial councils in England and the United States may differ widely in many regards, but in this they are similar. Presumably this will involve some shift in emphasis from profit to better working conditions or even to product. If workers can be brought to appreciate their position as consumers as well as producers much gain may follow but it is too soon to speak of this with confidence.

Second, one may observe that any extension of the idea of industrial instead of geographical representation in legislative bodies will make for internationalism. So long as legislators are chosen to represent people residing in a given area of land, nationalism is encouraged. In so far as they frankly represent a given industry, such as steel or oil, their interests cannot well be confined within geographical limits, but will extend as far as the industry. Individuals residing in the agricultural districts of East Prussia may be needed to advise or to vote in a Russian duma because of the close relationship of the agricultural life of that region to that of Russia proper. The lumber interests of our great Northwest are not divided by the Canadian boundary line nor the grazing interests by that between the United States and Mexico. Charges have often been made that legislators chosen nominally to represent certain industries have often shown undue concern for foreign connections of those enterprises. If this be true it is an evidence of the international character of our economic life and a legislative body frankly chosen on an industrial basis would be more open and more honest and would be an important factor in the development of economic internationalism. In addition to the more radical proposals for such representation as

it is now being tried in eastern Europe there is to be noted the national gild movement of England which definitely urges a unity of interests among producers which calls for their organization as such, the state retaining the function of safeguarding us as consumers. Even if none of these proposals and experiments succeed they reflect a changed outlook and a new point of view which may have some effect on our future institutions.

Clearly this summary of influences operating for and against economic internationalism is incomplete. To the writer the ones named seem the most important though it may well be that in the long run others will be more significant. Thus newspaper correspondents in France have recently reported that the free traders of that country are elated over the effect of air transportation on protection. Collection of duties becomes almost impossible when goods can be imported by airplane and this may greatly modify or compel the abandonment of protective tariffs and so encourage internationalism.

Apparently internationalism must be built upon nationalism. For the present the influences that produced economic friction in the nineteenth century persist and are even magnified. A rivalry more acute and dangerous than that of the past may be confronting us. Desire or necessity for profit, belief in the efficacy of a "favorable" trade balance and confidence in "national self-sufficiency" combine to aggravate the difficulty. Nevertheless the conomic interdependence of the world is a fact that is slowly becoming recognized, there are some decentralizing tendencies and out of today's confusion may come a different outlook and a new conception of welfare. With such changes will come new perplexities but international conflicts may be fewer and international coöperation more common.

International Phases of the Land Question

By T. N. CARVER

Professor of Political Economy, Harvard University

SUPERFICIALLY the land question would seem to be wholly a national or a local question with little or no bearing on international problems. Fundamentally, however, there are few questions of more far-reaching and enduring international interest. The currents of human migration in the past have been mainly in pursuit of land. Land policies, of course, had nothing to do with the migrations of primitive tribes. These were mainly migrations of conquest. Wherever unpeopled lands have lain within the jurisdiction of governments strong enough to repel invaders the peopling of such lands has been a question of the land policy of the government.

LAND POLICY OF THE UNITED STATES

Our own national history has been affected by our land policy more, perhaps, than by any other single phase of our governmental activity. If one were asked to name the most important institution in American life up to the end of the nineteenth century he would not go far wrong if he were to name the *Prairie Schooner*, not so much for what it was as for what it symbolized. It symbolized the joining of man and nature—the making of effective contacts between population and land, than which nothing could be more fundamental. The establishment of allodial tenure in the northwest territory by the ordinance of 1787 was quite as important in giving character to our national life as the better known provision prohibiting slavery and guaranteeing a republican form of government. This popular system of land tenure made land the private property in fee simple of the individual to whom it was deeded by the government.

This kind of land tenure satisfied the land hunger of the adventuring, pioneering type of man more fully than a less popular and individualistic form of tenure could possibly have done. It therefore tended to stimulate westward migration as no other policy could possibly have done. Besides it made land a merchantable

commodity and this tends to put land in the long run into the hands of those who can use it most effectively. The reason for this is that any piece of land is worth more to a farmer who can use it effectively than to one who cannot. Where no obstacle is put in the way of the free transfer of land, that fact will in the long run put each piece of land in the hands of the most efficient user.

Westward migration, however, was not wholly a local or national affair. The landless men came not simply from our own population but from all countries of Europe. If one had charted on a map of the world the currents of human migration he would, to begin with, have made the most important map ever drawn, and what is more to the point of the present discussion the map would have shown that these currents of human migration paid, apparently, little attention to national boundaries. Back of these migratory currents, and in a sense causing them, or at least making them possible, was the liberal land policy of our federal government.

INFLUENCE OF THE MONROE DOCTRINE

The Monroe Doctrine likewise had its part in determining the course of these currents. Land seekers from Europe naturally preferred to seek land under a stable and intelligent government, rather than under an unstable and undependable government. The desire of European governments for colonies and dependencies was not wholly due to the rapacity of autocratic rulers. It was in part due to the unwillingness of land seekers from those countries to settle under the turbulent and unstable governments of Latin America. Our enunciation of the Monroe Doctrine made it certain that land seekers who came to the Western continent would find a stable and dependable government nowhere else than within the boundaries of the United States. By concentrating the currents of international migration upon our own shores, we enormously hastened the sale of our public lands and the settlement of our western territories. There is no evidence that this was the deliberate intention of the propounders of the Monroe Doctrine, but there can be no doubt that it was one of the results.

One of the uncertainties of the period on which the world is now

entering is the possible redirection of these currents of migration. There is no inherent necessity compelling them to set westward rather than eastward. It has happened since the discovery of America, that vacant lands lay to the West rather than to the East. The prehistoric migrations into Europe tended westward rather than eastward for the same reason. Everywhere the tendency of rural migrations is away from densely peopled to sparsely peopled lands.

The coming of the Turk into the western world was the last great disturbance which turned the currents of migration in a new direction. Europe was already beginning to flow back upon Asia when the Turk arrived. It was this fact, as much as any other, which caused Europe to face westward again instead of eastward. The probable elimination of the Turk as a result of the great war may reverse the process. Eastward Ho! may be the cry of the land hungry during the next century. "Ararat or bust" may by the middle of the present century play a part similar to that played by "Pike's Peak or bust" in the middle of the last. A liberal land policy in Asia Minor and Mesopotamia under some kind of a stable and dependable government will in all probability turn land seekers in that direction. Without a liberal land policy and without a stable government land seekers will have no inducement to turn in that direction.

EXPANDING VERSUS PENT-UP CIVILIZATIONS

Another result, almost equal to migration in importance to all countries, and like it depending upon land policies, is the question of the expanding *versus* the pent-up type of civilization. An expanding civilization is one in which population may increase indefinitely through the expansion of the opportunities for gaining subsistence. This will require an agricultural population to spread over wider areas or to colonize. It will require that an urban population should expand its markets. A pent-up civilization is one which maintains itself permanently in a given territory. In agriculture this means the continuous *morcellement* of land or the development of a numerous agricultural proletariat. An urban population must become stabilized both as to numbers and types of industry, or it must press incessantly upon the means of subsistence. Both rural and urban populations are faced by one,

and only one, alternative. It will either become over-populated and be forced to reduce its standard of living, or it will exercise birth control.

Types of National Civilization	Expanding	Rural	Spreading beyond national boundaries Enlarging national boundaries
		Urban	Enlarging markets in other countries Building colonies with which to trade
	Pent-up	Oriental	Overpopulation Forced migration
		Occi- dental	Exercising birth control <i>Morcellement</i> of land

The land policy of the Code Napoleon requiring the subdivision of estates, while it looked fair enough, undoubtedly tended to encourage each rising generation to hang around home, waiting for the old folks to die in order to get a share of the land. This tended to develop a pent-up rather than an expanding type of civilization. The English system of primogeniture, while monstrously unfair, had the opposite effect. The younger sons, knowing that there was nothing to be gained by waiting for a share of the family estate, were forced out into the world to seek their fortunes independently. It is no accident that those nations that retained primogeniture, or something like it, such as England and Prussia, have continued to expand, while those that adopted the Code Napoleon ceased thereafter to expand.

The United States, however, during the greater part of the nineteenth century continued to expand in spite of our adoption of allodial tenure and something similar to the Code Napoleon in regard to the subdivision of estates. This, however, is primarily due to the artificial encouragement which the federal government gave to land settlement through the preëmption, homestead and timber culture laws. Since the practical exhaustion of all that part of our national domain which is fit for settlement, further expansion has tended to carry our rural people beyond our frontiers into Canada and Mexico. Recently, however, the name of democracy has been invoked against further expansion when it involves the spreading of our people beyond our present national boundaries. Notice is served upon American enterprises that if they seek to colonize as farmers, or expand their business as merchants and manufacturers beyond our boundaries, they do so at

their own risk. Our present political tendencies, in short, are calculated to encourage the pent-up type of civilization and to hinder further expansion.

PROBLEMS OF AN EXPANDING CIVILIZATION

This undoubtedly raises large international questions, though like the question of human migration it is too large and important to be of any interest to the average statesman. An expanding civilization leads to a clash of interests between nations and races. Each expanding race must sooner or later come into competition for lands and markets with some other expanding race. This will require diplomacy of the greatest wisdom and skill if we are to avoid future wars. Each nation can develop a pent-up civilization without competing with any other nation which is likewise content with a pent-up civilization. In this case, however, birth control is the only agency that can avoid ultimate overpopulation. These alternatives present a rather hard choice but it is the only choice before us. There is no other alternative.

The possibilities of further expansion within our present boundaries are scarcely yet appreciated. Along our northern border lies a strip of cut over timber lands extending from Maine to Minnesota, which is capable of providing a vast addition to our present food supply. Though too far north for our greatest crop, corn, it is not too far north for wheat, oats, rye and barley and it is ideal potato land. Potatoes may yet become our greatest food crop as they have already become in Europe. Another area, equal in extent and in possibilities of food production, is our southern coastal plain extending from Florida to southern Texas. Lying just south of the cotton belt it is ideal land for almost all truck crops and is especially adapted to the sweet potato, which is even more wonderful in its possibilities than the white potato, and is in fact one of the most remarkable food plants known to man.

STEPS TO BE TAKEN

Four things are necessary to bring these vast areas under food crops: (1) A population capable of consuming the crops and able to pay a remunerative price for them; (2) Means of transportation capable of carrying these crops to the population; (3) A change in the standard of living which will make the people willing to eat more potatoes, both white and sweet, than at present;

(4) A liberal land policy with respect to the reclamation and settlement of those lands.

Time itself will produce the first three conditions; we must take the initiative with respect to the fourth. Since these lands do not now belong to the national domain they are, of course, not open to settlement as our western lands were. A liberal policy on the part of our state governments in coöperation with the federal government may bring them under cultivation as rapidly as the needs of our population call for them.

There is also the dry farming and the irrigation farming of the arid west and the reclamation of considerable areas of swampy lands in the humid area to be considered. The possibility of more intensive cultivation of the lands already under cultivation is not to be ignored. This, however, can only come about through higher prices for crops or the development of better tools and machinery, unless it is to result in a reduction of the standard of living of the farming people. But there is no reason to doubt that the inventors will be equal to the task of devising instruments which will reduce the expense of intensive cultivation, as they have devised instruments to reduce the expense of extensive cultivation in the last century.

With all these possibilities in mind there is no doubt that we can, if we are forced to it, produce twice as much food in this country as we are now producing, and support approximately twice our present population without seriously reducing our standard of living or greatly increasing the prices of food products. Barring unforeseen inventions it is likely that some reduction in the standard of living will be necessary and some further increase in the prices of food. While technically the habit of eating a slightly larger proportion of potatoes would be counted as a reduction of the standard of living, it is not such a reduction as needs to be considered a real hardship.

We can, in short, expand our population considerably within our own boundaries without expanding our foreign markets or colonizing our farmers. In so far as we can do this we shall avoid competition either for lands or for markets with other peoples. This is a matter of the utmost importance. International competition for lands and markets, since the religious wars, has been the most prolific cause of war. Anything which can soften or postpone that competition becomes, therefore, a basic condition of peace.

The Declining Independence of the United States

By GROSVENOR M. JONES

Assistant Chief of the Bureau of Foreign and Domestic Commerce,
Washington, D. C.

THE boast of the average American for some years has been that the United States produces practically all that it needs in the way of foodstuffs and raw materials. This has been the idea not only of the man of the street but also of the statesman. The boast of the citizen may be attributed to national pride and to a perfectly human tendency to brag. In the case of the statesman, the boundless extent of many of our natural resources and the rapidity with which they have been developed in recent years so amazes him that he is often inclined to magnify the degree of our economic self-sufficiency. Then too, statesmen of a certain school have been so much in favor of the exclusion of foreign goods that some of them were tempted to wish that the oceans surrounding our coasts were impassable gulfs so far as trade with other nations was concerned. These men proceeded on the theory that we could get along without commercial intercourse with other nations.

That the degree of our self-sufficiency was unduly magnified is only now beginning to dawn upon the average citizen. But if he stops to think he will note the changes that have come over the United States in the past half century and will be deeply interested to observe the effects of those changes. He will realize that many of our important foodstuffs, such as coffee, tea, cocoa, and tapioca, come from foreign lands and that as our population grows we become more and more dependent upon foreign countries for those products. If he considers the subject of clothing he will realize that we are absolutely dependent on foreign countries for our supplies of flax and silk and for certain classes of cotton, and that for a large part of our wool supplies we must now look abroad. These things are well known but in addition he should know that our manufacturing industries are importing much of their raw materials from foreign countries; that we are, for example, dependent on the Far East for tin and antimony; on Peru for vanadium;

on Russia, Brazil, and India for manganese of the best grades; on Russia and Colombia for platinum; on Canada for nickel; and on the Straits Settlements, the Dutch East Indies, and Brazil for rubber.

TRADE CHANGES IN OUR EARLY HISTORY

A study of the course of the foreign trade of the United States since 1783 shows that there have been from time to time important changes in the character and direction, as well as in the volume, of our foreign trade. The causes and effects of these changes cannot be clearly understood unless we take into account the concurrent facts of our political as well as our economic history and of the political and economic events in foreign countries. It is, however, beyond the scope of this article to do more than indicate some of the more striking incidents. It will suffice to call attention to the fact that the continental wars of Europe in the early years of the nineteenth century gave a decided stimulus to the export trade of the United States, just as the heavy immigration from Europe following the revolutionary movements of 1848 and the potato famines of Ireland of about the same period contributed largely to the increase of population and the expansion of the agricultural industries of the Middle West and thereby to the growth in our exports of agricultural products. The passage of the Corn Laws in England had a marked effect on farm development in this country, while, of course, the invention of the cotton gin several decades earlier stimulated the production of cotton in our Southern States to the point where the United States soon became the world's primary source of supply for cotton.

The Civil War, or what Henry Watterson, in his recent memoirs, calls the War of the Sections, cutting off as it did the United States from its European sources of manufactured goods, brought about a marked development in our manufactures, particularly in the North, a growth which proceeded at a rapid rate in the five succeeding decades. Moreover, it led to a more rapid settlement of the country west of the Mississippi, while several decades of transcontinental railroad building made available not only to the people of this country but also to the world the vast agricultural, mineral, and forest resources of the great valley between the Appalachian and Rocky Mountain systems.

CHANGES SINCE THE CIVIL WAR

The three decades following the Civil War constituted a period of rapid and at times almost feverish development of the resources of all sections of the country. This was the period of greatest railroad building in the history of the world and of the most extensive land settlement and mine and forest exploitation in this or perhaps any country's history. It was a period of intense absorption in the initial development on a large scale of our own great agricultural, mineral, and forest resources, a movement which was assisted by a vast immigration from Europe and the investment of huge amounts of European capital. The development of the great natural resources of the Middle West and Far West was approaching its climax in the closing years of the nineteenth century and was then yielding place in popular interest to that equally remarkable development of manufacturing industries which has been in effect for several decades.

The last fifty years have also witnessed the rapid settlement and development of other sections of the world and therewith a remarkable increase in the world's wealth and in international trade. Thus, the self-governing dominions of the British Empire—Australia, South Africa, Canada, and India—have progressed by leaps and bounds and out of all ratio to the increase in population. Australia advanced first by reason of the gold discoveries and then as a result of the development of sheep raising and grain production; South Africa, as a result of the discovery of diamonds and gold; Canada, because of its agricultural and lumber production; and India, by reason of its general economic advancement. During this period, Japan, and in a lesser degree China, made quick response to the stimulus of occidental ideas, while some of the nations of Europe, such as Germany, also made remarkable progress. At the same time certain Latin American countries, notably Mexico, Argentina, Brazil, Chile, and Uruguay, attained places of importance in the world's economy.

The fifty years preceding the outbreak of the recent war in Europe was a period of intensive development of the world's resources. The production of all food supplies and basic raw materials advanced at a progressive rate. International trade became more extensive in response to increased demands for the goods of other nations and was facilitated by the improved mechanism

of trading. Just as the building of transcontinental railroads assisted in the development of the resources of our Western States and in the binding together of this nation, so did the development of the steamship assist in the exploitation of the resources of many virgin countries and result in closer trading relations among the nations. With the slower, smaller sailing vessels, the economic development of such remote lands as Australia, New Zealand, South Africa, Japan, China, and India, would have been far less advanced than it is today. The cable also brought the nations closer and facilitated international trade. Investment of capital abroad by the older nations of Europe, particularly Great Britain and France, and the comparative peace of the world for several decades prior to 1914, were a stimulus to rapid and efficient exploitation of the resources of nearly every section of the earth.

CONDITIONS AT THE CLOSE OF THE NINETEENTH CENTURY

Toward the close of the last century there was apparent a decided change in the character of the foreign trade of the United States both on the import and on the export side. This was coincident with the change in the trend of our economic development. The produce of our farms was not mounting in quantity as formerly. It began to appear that we were reaching the peak of our production of wheat, corn, and the other grains, and that we had about reached the maximum number of cattle and sheep that could be sustained on our lands. This condition was reflected in our exports although the rise in prices beginning in 1897 tended to cover up the annual decline in quantity of exports in the case of many of these leading agricultural products. At this time manufactured goods began to be exported in increasing volume and there was a corresponding increase in the importation of raw materials and of semi-manufactured products.

Even if the war in Europe had not occurred this shift in the character of our imports and exports would have continued in the direction of an increasing proportion of manufactured products in our exports and of a corresponding increase in the proportion of raw materials and semi-manufactured products in our imports. It would have been accompanied by a gradual liquidation of our indebtedness to Europe which had been created by European investments in the United States, and also by a rapid extension of investments of American capital in foreign lands.

The recent war has accelerated certain pre-war tendencies in our foreign trade and has produced conditions that are decidedly new. The war has changed us from a debtor to a creditor nation and whereas formerly we owed Europe four or five billions, Europe is now indebted to us, if credit be given for the American securities still held there, to the extent of nine or ten billions. It has given us increased financial power. It has given us a merchant marine which we probably would not otherwise have had for many years. It has brought about a more rapid extension of our trade in foreign markets and a better understanding of the need and importance of foreign trade. It has resulted in a tremendous increase in our production of all classes of manufactured goods as well as of mineral, of forest, and even of agricultural products, at the same time introducing certain new industries. The war, too, has practically stopped immigration. Whereas before the war the number of immigrants ranged from 700,000 to more than a million persons annually, during the war the number was very limited, and there is prospect that in the immediate future it will still continue small.

EFFECTS ON OUR TRADE POSITION

All these changes produced by the war have altered our position in international trade very materially. Our position as a debtor nation required us to pay several hundred millions of dollars to Europe annually in interest and acted as a spur to our export trade, but by the same sign the liability of Europe to us for 500 or 600 million dollars in interest may operate, in the immediate future at least, as a hindrance to our export trade.

The war has also had a profound effect upon the economic development of other countries and has thereby altered their standing in international trade, to the advantage of certain countries and to the detriment of others. The full force and effect of the changes produced are difficult to gauge amid the uncertainties of the transition period. Not until a conclusive peace has been signed and accepted and the nations have begun to devote their whole energies to peace-time pursuits, can forecasts be made with any assurance.

RECOVERY IN EUROPE

Of all the nations of Europe probably none have been affected by the war more than have Great Britain and Germany. While

the former lost heavily in ships and also lost some ground in foreign trade, and piled up a huge debt which must place a heavy tax burden upon her industries, nevertheless the necessities of the war acted as a spur and not only introduced important new industries, but also revitalized most of the old ones, which have in many instances new and larger plants, more modern machinery, and more modern methods of manufacture. The industrial outlook for Great Britain was described by Lloyd George three years ago in these terms: "A new Britain is being developed, a new industrial Britain. Under the great pressure of the war we are increasing and improving and quickening our industrial resources to an extent which would have been impossible but for the demands of this conflict."

The effects of the war on economic conditions in Germany cannot be appraised with much accuracy as yet. This much, however, is certain; the terrific loss of men must cripple many German industries for years; while the rehabilitation of her railroads and of a considerable number of plants in which machinery was worked to a feverish limit during the war, will require several years at least. Moreover, the low stocks of important raw materials for which Germany is chiefly dependent upon other countries, coupled with her crippled financial position, must further retard her resumption of industry. Then, too, the loss of Alsace-Lorraine will deprive Germany of her most important source of iron ore. The loss of the coal supplies of the Saar Valley would also have an effect. Add to these the payment of heavy indemnities, which will doubtless be imposed, and the relinquishment of most of her merchant marine, it seems clear that it will be years before Germany can again assume an important position in international trade. And yet, freed from the burden of maintaining large military and naval establishments and with the well-recognized organizing ability of her industrialists and the thrift and industry of her population, no one can predict how soon Germany will take an influential place in international trade.

The effects of the war upon the industries of Belgium and France need not be recounted. The numerous blast furnaces, textile mills, machine shops, sugar mills, and coal mines of Belgium and northern France have been either completely wiped out or so

badly damaged as to require years for making the necessary repairs. The fertility of large areas of agricultural land has been greatly impaired and hundreds of thousands of cattle and work animals have been destroyed or consumed. The speed with which Belgium and France are restored to their former industrial position will depend largely upon the amount and character of the indemnities they receive from Germany and upon the financial assistance extended them by their allies. The people of both Belgium and France are noted for their habits of industry and thrift, and, while there have been heavy losses in man power, these losses will be compensated for in part by the modernizing of industry and the introduction on a large scale of labor-saving machinery and methods. With Alsace-Lorraine France will not only secure a considerable increase in territory and population, but also enormous deposits of iron ore which have great value with the improved processes of smelting perfected since 1870, in addition to valuable stores of potash. If France also obtains, either permanently or for a limited term, the coal of the Saar Basin, she will be in a position of greater economic independence than she has been at any time since coal and iron began to determine the industrial importance of a nation.

The industrial districts of Poland—those near Warsaw in particular—have suffered heavily through actual destruction, or through pillage by the Germans. Large textile and other mills which were in or near Warsaw, Lodz, and other Polish industrial centers, will not be restored to their former activity for many months or perhaps years.

The economic rehabilitation of Russia is doubtless the most uncertain factor in the equation. If political conditions gave only a slight promise of betterment within the coming year, it would be far easier than it is at present to gauge the future of world trade, since Russia under ordinary conditions furnishes a large proportion of the world's supply of grain, lumber, hides, wool, manganese, platinum, and other commodities, and is now a very large but uncertain debtor to Great Britain and the United States as well as to France.

EFFECTS OF THE WAR IN OTHER PARTS OF THE WORLD

While in most sections of Europe the war destroyed or impaired industry, in other parts of the world it acted as a great

stimulus to industry. Absorption of the leading countries of Europe in the war stimulated agriculture, mining, and manufacturing elsewhere. These industries were stimulated not only in the United States but also in Canada, most of the Latin American republics, Japan, China, India, the Dutch East Indies, and South Africa. The stimulus of war has greatly increased the world's production of many commodities, as for example, wheat, corn, sugar, and rice, among agricultural products; copper, lead, and zinc, among the metals; iron and steel, textiles, machine tools, and meat products, among the more important manufactured products.

One of the significant effects of the war has been the shift in sources of supply for certain commodities. Manganese is an example. Formerly it was received from southern Russia but now, so far as the United States is concerned, it comes from Brazil. The shutting off of supplies of platinum from Russia, the world's principal source, stimulated the production in Colombia, the only other important source. The inability to secure optical glass and dyestuffs and other important chemicals from Germany has stimulated the production of these commodities in England and the United States.

The shortage of shipping during the war also has had a profound effect upon world trade. The scarcity of ships necessitated their use on the shortest routes regardless of the cost of commodities. Speed in delivery, not price, was the controlling factor. Huge quantities of grain, wool, mutton, and hides in storage in Australian ports although they could be had at prices far below those of similar products raised in the Argentine and the United States, but the time required for the voyage to Australia barred out most of the ships ordinarily engaged in that trade. The same was true of the sugar of Java. Time was of the essence and the nearest market was given the preference. This has had the effect of establishing more direct routes for American trade. Rubber, tin, and other commodities from the Straits Settlements and the Dutch East Indies come to us directly from those parts instead of by way of London and Rotterdam. Our trade with South America and the Scandinavian countries is also routed more directly.

OUR DISAPPEARING TRADE BALANCE

Contrary to the belief of many Europeans, the war alone is not responsible for the great increase in our foreign trade. The war doubtless accelerated the development of that trade, but the fact is that our trade with other countries was increasing in volume rapidly for at least a decade prior to 1914.

Far from helping, the great excess of value of exports over imports, produced by the abnormal war demands of Europe, has become so great as to threaten a temporary impairment of our foreign trade at a time when this trade is needed to take up the slack of the after-war period.

This check need not cause alarm. It is a natural reaction from the long period of extensive foreign buying in our markets. During the war the so-called favorable balance of trade has been liquidated in part by the return of several billions of American securities and by the payment of more than a billion dollars in gold, but an even greater amount is still due us in the form of British and French government loans of approximately one and a half billions, raised through private banks, and in credits of upwards of nine billions extended by the United States government.

It is clear that Europe cannot continue to import in large volume from the United States, without some new financial arrangements. Even if some satisfactory method of financing should be devised, the new credits would be absorbed largely in purchases of food-stuffs, necessary raw materials, and semi-manufactured products and not enough would be available for the conduct of a broad general trade on a very extensive scale.

Europe does not, however, appear to be demanding new credit facilities in this country except for the most necessary commodities. The countries seemingly most in need of credit are taking active steps to reduce their imports to the lowest possible level so as to revive their domestic industries as well as to right the balance of trade which has been heavily against them for several years. Passively these countries have withdrawn their support from the exchange market and are permitting exchange on New York to fall, largely no doubt, with a view to making this market an expensive one in which to buy.

Since Europe is now heavily in our debt and is desirous of

incurring as little additional indebtedness as possible, and since most European countries are not ready to export manufactured goods and raw materials even to the extent of the pre-war volume, and are not in a position to ship much more gold in liquidation of trade balances, the only immediate recourse of the countries indebted to us is to reduce to the lowest limit possible their importations from all sources and in particular, those from the United States. The stern facts of their economic situation demand this.

MAINTAINING EXPORT TRADE, THOUGH NOT AN EXPORT BALANCE

Nevertheless, Europe must buy in this market large quantities of foodstuffs, cotton, lumber, hides, copper, and other necessary raw materials, and also certain classes of iron and steel products, machinery, etc. During the coming year these purchases will probably far outrun in value our purchases from Europe. How will Europe liquidate this unfavorable trade balance in addition to paying 500 or 600 millions of dollars in annual interest on her debt to us? How can we make this market a favorable market for Europe to buy in? There are several possible solutions of this problem, namely:

(1) We might invest largely in public-service and industrial enterprises in France and Belgium, either by putting capital into new enterprises or by purchasing the securities of established companies. Both countries will require immense amounts of new capital until their industries are restored and will probably look to the United States for much of it.

(2) We might increase our importations of certain raw materials or semi-manufactured materials. Since, however, we were accustomed to importing these commodities in large volume from Europe before the war, we cannot hope to increase their importation in any considerable degree.

(3) The liquidation, as formerly, through London of increased balances due certain of the possessions of Great Britain in their trade with us would operate as offsets. And an increase in our imports of jute, tea, etc., from India, of tin and rubber from the Straits Settlements, and wool, hides, etc., from Australia and South Africa would, therefore, be helpful. The proceeds of the

sales of these commodities really go in large measure to British capital and in the international exchanges operate as offsets in the account of Great Britain with us. Likewise the income from French and Belgian investments abroad would operate to bring up the items on the credit side of those countries. The exchange situation as between Europe and the United States would, therefore, be helped by our increased importation of the produce of the overseas possessions of Great Britain, France, and Belgium, or from countries in which they have large investments.

(4) Exports could be maintained more nearly at their present level if the flow were directed somewhat from Europe and more into other parts of the world, either in direct sales or in the form of investments. Little would be gained, however, so far as our trade balance with Europe is concerned, if our foreign trade activities in other markets deprived Europe of its customary trade in those markets. The most helpful activity would be by way of investment. Now that the United States is a creditor nation the tendency to make investments abroad will be more marked; in fact, since France and Belgium and Germany will not be in a position to make foreign investments for a number of years to come, and Great Britain's power to do so will be greatly diminished, the United States will be required by force of circumstances to become the great investing nation. This will merely accelerate a tendency well under way when the war broke out, for the field of our investment was then widening so as to include Chile, Peru, Argentina, and Brazil, as well as the nearer countries of Canada, Mexico, Cuba, Porto Rico, and the Central American countries.

(5) The resumption of travel in Europe will doubtless help to restore the balance since it is probable that the number of Americans desiring to visit Great Britain, France, Belgium, and Italy will be greater than ever.

(6) The remittances of Americans to relatives and friends in Europe will doubtless be far in excess of sums thus sent in the past, since there will be large demands on the generosity of the more fortunate kinsmen in the New World. This, too, will tend to restore the equilibrium in the trade balance.

(7) In the matter of payments to Europe on account of services, as for instance, freights and marine insurance on American goods,

it is hardly possible that the net outgo will be as great as before the war, since we are now less dependent on foreign ships and on foreign marine insurance companies. We cannot, therefore, look in this direction for any compensating factor in the trade balance.

INVESTMENTS IN EUROPE MOST IMPORTANT

Of all these possible solutions that of large-scale investments in European enterprise seems the most practical. A feasible method of financing purchases of machinery and equipment as well as raw materials for industrial plants damaged in the war, would be for the American manufacturers or producers furnishing these commodities, to arrange with their bankers or investment brokers to take in payment the bonds or preferred stock of the concern. Or it might be financed on a much larger scale in some such manner as the following: A syndicate of iron and steel manufacturers in Belgium, for instance, might pledge their joint resources and credit as security for loans from a syndicate of Belgian banks. The bonds or notes covering these loans might then be sold to a syndicate of American bankers, who would probably find a good market in the United States for securities of such high character.

Some satisfactory arrangement for financing the needs of Europe will doubtless be found. This means that it is only a question of time before Europe will resume heavy buying of a number of raw materials and many staple lines of manufactured goods, such as iron and steel products of various sorts, machine tools, factory equipment, and perhaps steel rails, locomotives, and cars. The importations of most lines of manufactured goods not urgently required for the physical reconstruction of damaged factories and railroads will probably be deferred for a considerable period.

The war, it is clear, has changed, at least temporarily, the character, extent, and direction of our foreign trade. While it has freed us from indebtedness to Europe, it has made us more dependent on other parts of the world for supplies of foodstuffs and many important raw materials. This dependence increases as our population grows, as our manufacturing industries become larger and more diversified, and as the costs of interior transpor-

tation in the United States become higher. In addition we shall find it necessary to receive interest payments on foreign investments and on loans to foreign governments largely in the form of foodstuffs, raw materials, and semi-and wholly manufactured goods. This will tend to facilitate importation and to make us more largely dependent on other countries than we now are. Our proud boast of economic self-sufficiency can be made with less assurance now than formerly.

The Vital Concern of Agriculture in Foreign Trade¹

By CHARLES J. BRAND

Chief of Bureau of Markets, United States Department of Agriculture,
Washington, D. C.

THE signing of the armistice on November 11, 1918, marked the beginning of the end of one of the most active, not to say feverish, periods in manufacture and commercial pursuits the United States has ever witnessed. Producing industries of all kinds and the trades dependent upon them had been working at a high pitch which the sudden termination of the war ended, leaving these enterprises with complete organizations and production potentialities that naturally are seeking to find further expression. While domestic business activity is good, a surplusage of producing power exists beyond the absorbing ability of the domestic market. Hence we have an extraordinary interest in foreign trade which feels on the whole that something like the peak-load production of the past two years can be maintained.

As a fundamental proposition foreign trade is no more essential to the United States now than it was in ante-bellum days. This is true in reference to agriculture as well as other industries. Indeed, it is more true of agriculture for, relatively speaking, export trade in agricultural products has decreased progressively during the last fifty years. Since 1850 the foreign commerce of the United States has multiplied over ten times. At that time over 80 per cent of our exports were agricultural products. Official figures published in 1915 showed a reduction in value of the agricultural part of our exports to something over 47 per cent of the whole.

HOME MARKET LARGEST AND BEST

There is a general inclination throughout the country to attach an importance to the development of foreign trade that may not be wholly warranted. At any rate we should certainly be rational in our attitude toward the question and not, as Mark

¹ This paper was read in Chicago on April 24, 1919, at the Sixth Convention of the National Foreign Trade Council.

Twain once expressed it regarding another matter, "try to get more out of an experience than there is in it."

The best and greatest market is the home market. It should first be developed in a thoroughly scientific manner, bearing in mind that the population of the United States has grown from a little less than 76,000,000 to a little more than 105,000,000 between 1900 and 1918, an increase of 29,000,000. This is more than the total population of what was once Austria. It should also be borne in mind that our increase since 1890 has been from less than 63,000,000 to the present population of 105,000,000, the increase of 42,000,000 representing a population greater than the French Republic. Brazil is of course the most populous of all our Latin American neighbors but her population is only about 25,000,000, which is less than we have gained since 1900.

The waste and disturbance of war have been such during the past four years that it seems likely that the demand for agricultural products in the raw and manufactured form to supply civilian needs, as well as for relief and reconstruction purposes, will take precedence over nearly all lines of export. The value of the agricultural products that went into the export trade in 1901 (\$951,628,000) represented 65 per cent of the total value of all exports for that year. The demand for war-making devices and materials in 1917 was so great that the proportion in 1917 was reduced to 31 per cent of the total. During the same time the value of agricultural products imported grew from nearly \$392,000,000, or 47.6 per cent of the total imports, to the value of nearly \$1,404,000,000, or 52.8 per cent of the total imports.

Confining our attention to the more recent past, profound changes have taken place in the quantity of particular kinds of agricultural products exported during recent years. The exports of cattle decreased from 459,218 in 1901 to 18,376 in 1914; those of beef and beef products, so far as ascertainable, from 705,104,000 pounds in 1901, to 151,212,000 pounds in 1914. Pork and pork products decreased from a billion and a half pounds to less than a billion. Corn, wheat, flour and meal, expressed generally in terms of grain, decreased from 397,395,000 bushels to 156,315,000 bushels. Cotton and tobacco, on the other hand, showed a substantial gain between the years mentioned, although there was great fluctuation from year to year.

WHY EXPORT TRADE IS NOW MORE IMPORTANT

Before the war, agriculture's interest in the export trade was chiefly in its function as an outlet for surpluses. It served in this respect to relieve pressure on the domestic market. Production was not undertaken primarily for export purposes, so that exportation varied greatly with the surplus from year to year. So far as producers were concerned, at least, export trade was not regarded as an essential feature of their business, although the trade of course constantly sought export outlets.

The world war has wrought a change in this matter. Producers and other organizations have come to realize the importance of developing export trade. They are asking improvement in methods, expansion in the necessary shipping facilities, specialized services for particular products, such as suitable ships for transporting live-stock, properly equipped space in ships, particularly for American fruits, etc. Because of war conditions they have enjoyed some of the benefits of foreign markets and the competition which they afford, so that they have become interested in trying to hold a fair proportion of the largely increased trade, particularly with Europe. This is neither unnatural nor reprehensible, but is the outgrowth of the trade which came from their patriotic efforts to satisfy the needs of our associates in the war during its progress.

Agriculture is interested not only in the direct export of raw farm products, but it has a very great interest in the export of manufactures produced at home from farm products. Cotton and tobacco manufactures of all kinds, leather and leather products, and many foodstuffs, serve to swell the total of the nation's export trade by calling upon agriculture. It is estimated that in 1918, approximately \$400,000,000 worth of manufactured articles, prepared from the raw materials of agriculture, went into foreign trade.

Normally, raw cotton is the largest single item in our foreign commerce. The approximate annual value of the part of the crop that is exported is \$600,000,000. With the growth of imports from other countries, the national importance of cotton to our trade balances has been very great. Cotton has not enjoyed the protection of a governmental guaranty of price as has wheat; therefore fluctuations affecting the well-being of

millions of producers and laborers have marked the whole war period. A serious situation exists at the present time in the cotton belt, due to inability to find a market for the lower grades of cotton that constitute a part of every crop. Before the war, Germany and Austria took about 3,000,000 bales of our cotton. A relatively large proportion of their takings was made up of low grades. For four years now there has been a tendency toward accumulation of such qualities, so that at the present time, while Middling cotton is bringing a fair price, the lower grades are bringing so much less as to put them practically on the basis of a pre-war value.

Persons not familiar with the cotton situation are inclined to be quite critical of cotton prices. They should bear in mind that for practically two years Middling, the average grade, has in reality been bringing a premium, while all of the grades below Middling have been suffering discounts of great severity. Good Ordinary, the lowest grade of white cotton hitherto deliverable on future contracts, is now priced at least ten cents below Middling, whereas, through many years under normal conditions, its relation to Middling was only from one and one-half to two cents off.

The importance of cotton to the exchange situation and to our trade balances is such as to make this product a national and not a sectional issue. Formerly the cotton producer was even more dependent upon foreign trade than now. With the great increase of spindleage in the United States, home consumption of the raw material and export of manufactures have grown apace. Nevertheless, practically 50 per cent of the crop is still exported in normal years. Shipping conditions, foreign production, financing facilities, foreign stocks and consumption are all of decidedly vital concern to millions of our citizens who grow cotton and to additional millions indirectly dependent upon them.

The United States has always enjoyed a considerable export market for her grain crops. This trade developed in the face of distinctly adverse conditions, largely the outgrowth of our own lack of system and lack of uniformity in the grading of grain and its certification. The normal annual export of wheat before the war, based on a ten-year average, was about 110,000,000 bushels. With the acute need for food, the export of both wheat and flour, in terms of wheat, of the 1918 crop, are expected to be about

300,000,000 bushels. Needless to say, this great quantity will not be exported in future years, as high prices have stimulated domestic production in Europe, and the return of peace will result in a relatively greater satisfying of home wants by home production. Furthermore, this export was enjoyed by the United States in good part, because of the loss of tonnage occasioned by U-boat activities. In the future Argentina, Australia, Canada, India, Algeria and other wheat-producing countries will compete with us for their former proportion of the world's demand.

OBSTACLES TO EXPORTS IN THE PAST

In 1915, the Congress passed the United States Grain Standards Act, which requires the use in all interstate and foreign commerce of grades established by the United States. During 1916, Mr. Moomaw, the specialist in foreign market investigations of the Bureau of Markets, found in Europe a general prejudice against American grain. With few exceptions, importers expressed a disposition to buy such grain only when they could not purchase their supplies elsewhere, or when American grain was decidedly cheaper. This situation arose partly from natural causes. The United States is an enormous consumer of her own products, a condition which naturally results in keeping at home a relatively large proportion of the best qualities of any product. The artificial factors in the situation were absence of uniform grades and enforced use thereof, lack of proper facilities for conditioning grain, willingness on the part of some traders to ship against their export contracts grades that would not satisfy domestic contracts, and lack of knowledge of the proper conditions for successful shipping.

Broadly speaking, commercial competition, with unrestricted markets and freedom of transportation, produces a condition under which there can be but one price at the same time, for the same quantity and quality, of the same commodity, in the same market. Any notable variation from this condition will result in temporary disturbance. A lower price by one enterpriser will tend to result in the exhaustion of his stock in advance of other available stocks. The highest priced stock of any particular commodity will, other things being equal, be the last one to go into consumption.

In the development of our export trade, it is important to keep

such principles and facts as these in mind. It is true that special conditions such as tariffs, financial stringencies, lack of transportation facilities, monopolization, control, etc., may modify to some extent at any time the present operation of these principles. Nevertheless, except in so far as their operation is artificially interfered with, they are always effective. Labor goes where wages are highest. Manufacturers engage in the production of goods, or classes of goods, which promise the highest relative profit. Capital seeks investment where interest rates (with safety) are highest. Buyers generally, the world over, no matter what they seek, go where they can supply their needs at the lowest prices.

PRICES AND QUALITY BOTH IMPORTANT

The first requisite to success, therefore, is that prices be relatively reasonable. This fact, I believe, should particularly be borne in mind at the present time in the marketing of the remainder of our 1918 cereal crop and in the disposal of the huge crop that is promised by present indications for the current crop year.

Producers of grain, in all of the important growing areas, are keenly interested in retaining such part of the present export trade as is possible, having in mind not only the immediate but more distant future. To do this, prices must first be right; but then the business can be held only upon condition that the exporters deliver to Europe grain that compares favorably with that received from other holders. Trade practices also must be conformed to, as far as is compatible with the interests of a producing country, to the desires of the importers. Under the Grain Standards Act, the importer, through his representative in America, can secure, first, inspection by inspectors licensed by the United States government; thereafter, if the inspection itself seems unsatisfactory, they may appeal and have the true grade determined by the representatives of the government itself through the offices of grain supervision of the Bureau of Markets. The finding in such an appeal, issued by the secretary of agriculture, has the value of *prima facie* evidence in all of the courts of the United States.

A widespread interest is manifest among stockmen as to the possible demands in Europe for livestock and livestock products during the readjustment period. In order that they may enjoy

the advantage of the demands and in order to assist in the reconstruction of European herds, they want to know the extent of the possibilities. They want to know if quarantine regulations will be adequately modified, if ships and credits will be available. Owing to the extreme difficulty in securing space and the high rates charged, stockmen are interested to know what the shipping board will be able to do for them. The only rate which the bureau has been able to secure from private lines, is \$150 per head from New York to England. Only one line would quote a rate at all. Others stated they are not interested in this class of cargo.

The breeders of pure-bred stock also are much interested in the possibilities in South America. Brazil seems to be a particularly attractive field and is offering free entry and other inducements to encourage the grading up of its enormous herds of low grade native stock. America has imported pure-bred stock extensively from Europe, and it is significant that now instead of looking so largely to foreign sources for a supply, the industry is meeting home needs and beginning aggressively to look for foreign markets. In connection with livestock products, it is of interest to point out the need of continuing the largely increased export trade in condensed milk. Due to the war demands for concentrated foods, the condensed milk industry expanded enormously during the war. Old plants were increased in capacity, new ones were constructed, and breweries even turned to the production of condensed milk in lieu of beer. The foreign demand was abnormal and inevitably will fall off, but the plants and equipment represent a permanent investment which must be protected in so far as possible. The producers therefore are keenly interested in holding the war trade in so far as possible and in developing all possible new markets.

Mention has been made of the chief lines of interest to agriculture. The fruit and vegetable growers, the poultry producers, the honey and nut producers, the dairymen and the canners are all alive to the possibilities and seek information and assistance in the readjustment of the export trade and the development of new markets.

SERVICES RENDERED BY THE BUREAU OF MARKETS

In order to safeguard agriculture's interest in foreign trade and meet the growing demand for a specialized government service

in connection with this trade, the Bureau of Markets has undertaken to develop special facilities for investigating foreign markets. It has been found necessary to extend many of our lines of work beyond the American seaboard. A Division of Foreign Marketing has been established as a medium through which to carry on the investigations and to coöperate with other government agencies, such as the American Consular Service and the Bureau of Foreign and Domestic Commerce. A special effort has been made to avoid duplication of work and arrangements have been made to that end.

As a means of supplying producers and their organizations and shippers with current information, the bureau recently inaugurated a weekly circular called "Reports on Foreign Markets for Agricultural Products," and, judging from a large number of letters received from all parts of the country, the reports are timely and fulfill a useful purpose.

The following outline sets forth in brief form the general subjects of investigation, the specific activities, and the organization of the foreign trade work now in progress or to be undertaken by the Bureau of Markets as soon as conditions allow. All of the activities are regarded as important, but sufficient funds and facilities will not be available to proceed with them simultaneously or in the immediate future. They will be undertaken, therefore, in the order of their importance as funds become available.

1. The supply of agricultural products in foreign markets and the export surplus in the principal foreign countries with which the United States competes.

2. The consumption and consumptive demands in the principal importing countries.

3. The market preference as to kinds of products and the requirements as to grading, packing, and branding.

4. The channels of trade through which the products pass and the business practices involved.

5. The methods and costs of marketing both American and foreign products.

6. Methods of financing export trade in agricultural products.

7. The export forwarding, storage, transportation and insuring of agricultural products.

8. The economic conditions influencing the marketing of American agricultural products in foreign countries.

9. Trade opportunities for American agricultural products.

SPECIFIC ACTIVITIES

1. *Grain and Grain Products*

a. Continuation of investigations of the physical condition of grain in transit to overseas countries for the purpose of inducing improved stowage methods and thereby reducing the extensive loss and dissatisfaction caused by the old methods.

b. Continuation of efforts to inform fully the grain importers of foreign countries as to the benefits and advantages which they may derive from the administration of the United States Grain Standards Act. The importance of this point will be appreciated when it is understood that before the war the majority of European importers would not buy American grain when they could buy elsewhere. The administration of the act, with which the Bureau of Markets is charged, establishes a new and very satisfactory basis of grade and inspection, and if properly brought to the attention of foreign buyers it will serve to secure for the American grain industry a far better position in foreign trade.

c. An investigation of the marketing of American grain and grain products in European countries as to the competition encountered, the trade practices involved, the respects in which the American trade can be improved, and the possibilities of developing markets in Europe and elsewhere for grain products and by-products.

d. An investigation of foreign markets for American seeds. The importance of this work is greatly enhanced on account of the Russian situation, that country being a large exporter of seeds in normal times. Seed marketing experts were sent to Europe early in January for the purpose of studying the demands and methods of marketing.

2. *Cotton and Cottonseed Products*

a. Continuation of investigations and activities looking to the universal adoption of uniform cotton standards.

b. Periodical investigations and reports on the world's supply, consumption, and consumptive demands of cotton.

c. Continuation of work looking to the development of foreign markets for American-grown Egyptian cotton, the production of which is rapidly increasing in the Southwest.

d. An investigation of the business methods of European cotton merchants and their exchanges, encouraging wherever possible direct trade relations in purchase, arbitration, and exchange.

e. A study of foreign markets for cottonseed products as to the supply, demand, and possibility of developing the markets for the refined products, including a study of trade practices and methods.

3. *Livestock and Meats*

a. Continuation of the survey of the livestock situation in Europe as to the supply and possible demands upon America during the readjustment period, giving assistance to American breeders and exporters in supplying the demands. Two experts, representing the Bureau of Markets and the Bureau of Animal Industry, were sent to Europe early in February for an extensive investigation of the livestock, meat and dairy situation.

b. The dissemination among European importers and breeders of information relative to the American livestock industry as to sources of supply of the various breeds, and other information which may be of help to them in making purchases in America. Information is now being assembled for this purpose.

c. The accumulation and dissemination of information relative to world trade in livestock and the position of the American industry in the trade.

d. A survey of the extent to which Europe may require importation of meat and meat products during the next few years until the European herds may be increased to normal.

e. Periodical surveys of the meat supply and market situation throughout the world, with particular reference to the conditions in Australia and the Argentine which are large sources of supply.

4. *Dairy and Poultry Products*

a. A study of the possible extent of European demands for dairy products during the period of readjustment. Now in progress in connection with the livestock and meat investigations of the bureau.

b. An investigation of the methods under which American dairy and poultry products are exported and marketed in the

foreign countries, with particular reference to the medium through which the products are handled.

c. Periodical surveys of the conditions in the world's trade in dairy products.

d. A study of the possibilities of developing foreign markets for American dairy and poultry products and the best methods of procedure to be followed by American producers and exporters.

5. *Fruits, Vegetables, Nuts, and Honey*

a. Continuation of investigations of foreign markets for fresh and dried fruit, with assistance to fruit shippers in reconstructing the former substantial trade with Europe and in developing export outlets in other directions. Bulletins to be issued in the near future giving results of fruit market investigations recently completed in the Far East and Australasia.

b. Continuation of investigations and experiments in the physical handling of fresh fruits and vegetables in transit to overseas countries, looking to improvement in methods of stowage and reduction of the extensive loss incurred from deterioration on the steamers.

c. A study of the possibilities of expanding the foreign trade of the United States in vegetables, both fresh and dried, including potatoes.

d. An investigation, in close coöperation with the Bureau of Foreign and Domestic Commerce, of the export trade in canned fruits and vegetables and vegetable oils, as to the possibilities of developing the export outlet, the methods of marketing and the demands of foreign countries.

e. An informational service on foreign markets for nuts and honey.

6. *Tobacco*

The accumulation of information as to the stocks and consumption of leaf tobacco in foreign countries, and as to the condition of the markets for the several classes, with studies of marketing and distributing methods.

7. *The Export Forwarding and Transportation of Agricultural Products, and Marine Insurance*

a. An investigation of the methods of forwarding agricultural

products to overseas countries as to the steps which must be taken by the shippers in securing space and arranging for shipments.

b. The methods of steamships in loading and discharging cargoes and in adjudicating and settling claims for damage.

c. Collection and information as to ocean freight rates on the various agricultural products both from the United States and from foreign countries to the principal foreign markets.

d. A study of marine insurance for agricultural products as to the extent of risks assumed, the rates charged, and the possibility of securing insurance to cover risks heretofore not covered.

8. *Assistance to Producers and Exporters in Developing Foreign Markets*

a. The organization and dissemination of useful information among producers, their organizations, and exporters, relative to foreign markets, trade opportunities, trade mediums, methods of marketing, and the other subjects investigated.

b. The encouragement of special production and approved methods of grading, packing and branding to meet peculiar foreign demands.

c. The encouragement of foreign marketing organizations among the producers under the provisions of section 6 of the Clayton Act, with assistance to the producers in forming such associations.

d. The encouragement of foreign marketing organizations among exporters of agricultural products under the provisions of the Webb-Pomerene Act, with assistance to exporters in forming such associations.

ORGANIZATION AND FACILITIES FOR CARRYING ON THE WORK

1. *In the United States*

a. Foreign trade specialist in charge of division, with headquarters at Washington.

b. Investigators for work among exporters, forwarding agents, steamship operators, port corporations, to secure the large amount of information which is available among these firms relative to the foreign marketing of agricultural products and to assist in the improvement of methods and in the solution of export problems.

c. Research, statistical and editorial assistants, including translators, for assembling from foreign publications information for

use in answering inquiries and preparing publications relative to foreign markets and world trade in agricultural products.

d. A publication to be developed as soon as practicable, as a means of disseminating useful information relative to foreign markets and promoting the interests of American agriculture in world trade.

e. The assistance of the bureau's organization as a whole, with the extensive staffs of commodity experts, branch offices, and market reports in the various lines.

2. *For Foreign Countries*

a. Several agricultural trade commissioners, as permanent representatives in Europe, with assignment to definite posts and territories, providing them with ample facilities for the performance of their duties.

b. Special investigators, to be sent out from time to time as in the past, to make investigations in specific lines as the needs of the producers and exporters may require.

c. Coöperative assistance of the American consular service and the Bureau of Foreign and Domestic Commerce.

Space does not permit more than a brief mention of agriculture's interest in foreign trade, and the plans and work of the Bureau of Markets to serve that interest. It may be fitting to state that the exporters, those who have nothing to do with the question of production or of initial distribution to market centers or the ports of the country, can be of inestimable service in promoting agriculture's interest in foreign trade. They can do much to find new markets, to improve handling and shipping facilities, to keep up the price to the producer and keep down the cost to the foreign consumer and to find and develop new markets. As a rule the producers are unable to participate directly in export trade. Except where they may be effectively organized, they must depend entirely upon inland and export merchants to improve and develop the export outlet. In view of the vast extent of the industry both as to investment and production, with what it entails to the prosperity and happiness of a large percentage of the population, the merchants, or middlemen, as they are called, have a most important mission to perform aside from the business of money making.

Commercial Dehydration: A Factor in the Solution of the International Food Problem

By S. C. PRESCOTT and L. D. SWEET

Division of Dehydration, Washington

THE world war through which we have just passed has awakened us to the importance of the theories of Malthus, long since expressed. In days of peace, with new countries opening up and extending their agriculture, new and improved methods of food handling and transportation we were inclined to regard the dangers of food shortage or starvation as imaginary and impossible, and to believe that our system of crop production and marketing, while not fully utilizing the scientific knowledge available, were at least sufficient to safeguard us from hunger or serious economic disturbance. Now the awakening has come, and we appreciate more fully than ever before the perils which may threaten through waste, unscientific methods and an improperly coördinated regulation of supply and demand.

The four and one-half years through which we have just passed have, because of the war, caused us to study deeply the problems of food supply and food control. It has fallen to this country to be the storehouse from which enormous supplies of foods have been withdrawn for the use of the fighting forces and the civilian population of Europe. This demand upon our resources has been very largely for cereals and especially for wheat. Because of the necessity for sending enormous quantities of breadstuffs to the Allies, the conservation of food supplies has been studied with particular acuteness, and these studies have had their fruition in the movement for war gardens and for more careful preservation by canning, and particularly in the stimulation of drying as a means of protecting foods against spoilage and preserving them for future use.

Dehydration, dessication, or drying as applied to foods may be defined as the process of removal of surplus water without destruction of the cellular tissues, or impairment of the energy values. Since practically all foods except the ripe seeds of cereals, legumes,

and a few other food plants contain a large percentage of water and as a result are of relatively short keeping quality unless conserved by special means, it follows that the rapid, regulated evaporation or drying of such foods will add greatly to the world's stock and in a form which is capable of easy storage, favorable transportation and universal employment.

DEHYDRATION AN OLD PROCESS

Dehydration is not a new art for drying has been known for hundreds of years and is probably the oldest method of food preservation which the human race has employed. In our own country it was used in the early colonial days for both vegetable and animal foods. Massachusetts colonists dried corn after it had been cooked, the product being known as samp. As soon as fruits were produced, these, and especially the apple, were also dried in considerable quantities. Along the coast the drying of fish became an important industry, and throughout New England to the present time will be found the application of this process of food preservation as a sort of local or primitive industry. In other parts of the country other vegetables and fruits and meat products were dried. Peas and sweet corn may be mentioned as examples of the former, while along the Pacific coast the long sunny period lends itself particularly to the drying of prunes, raisins, and other fruits. In the arid regions of the interior the Indians, and later the early settlers, dried their beef or buffalo meat by cutting it into thin strips and hanging them up for the sun and wind to remove the excess moisture and sear over the outside with a protective coating which would prevent infection and spoilage. This was known as jerked beef. Thus, long before the advent of canning on an extensive scale, the process of drying had been utilized in this country. In other countries it had doubtless been used for hundreds of years.

Dried fruits have been used in America for many years and have become an important part of our food products. On the other hand, dried vegetables have, until recently, been prepared only on a small or domestic scale, probably owing to the plentiful supply of fresh materials. The movement due to the necessity for increased conservation of foods has stimulated experiments along this line, especially during the past two years, with the

result that many foods formerly never kept in the dried condition are now suggested for domestic use, as articles of commerce on a large scale, and as items in the food supply of our Army and Navy, in the large camps and for overseas shipment to our own troops and to our Allies. The preparation of these so-called "dehydrated" foods is now being planned extensively by numerous manufacturers, and a great increase in output for the present year is suggested.

That this is not a really new and untried form of subsistence is evident when we recall that such foods have been used by explorers, in the tropics, in our own armies, and in the armies of other nations. During the Civil War dessicated products were used quite extensively especially as a means of combating scurvy among the troops, and numerous reports of medical officers mention the use of concentrated soup, dessicated vegetables and dried apples and peaches as additions to the regular ration issued as a safeguard to the health of the men. During the Boer War these foods were supplied to the troops in considerable quantity with good results. At the outbreak of the present war large orders were placed by the British authorities, and these foods have been constantly supplied to them. Millions of pounds of dried potato and other vegetables, and of mixtures of vegetables to be used for preparation of soups and stews have been sent across the Atlantic from Canada and the United States.

While vegetables and fruits of all kinds may be prepared in dehydrated form, this report deals chiefly with those products which appear most available as army supplies, as potatoes, turnips, cabbage, onions, carrots, tomatoes, beets, and spinach, and the soup mixture commonly spoken of as "Julienne."

DRYING OVERSHADOWED BY CANNING

Approximately 100 years ago a new method of food preservation was introduced into America. This was the process of hermetically sealing in air-tight containers and subjecting to heat. It was brought to America from England, where it had been practiced for about fifteen years. The first patent on the preservation of food in air-tight containers was granted about 1806 to an Englishman, Saddington, and another in 1810 to a Frenchman, Appert, who independently discovered the method and utilized

it in France. This process was brought to America by William Underwood, who, after tramping over the whole eastern section of the United States, finally settled in Boston and established a company for preserving foods by his process.

The process of canning was at once seen to be so simple and so applicable to many kinds of food materials that it apparently completely overshadowed the simpler process of drying. This was especially the case after the introduction of tinned "cans." Furthermore, canned foods could be transported into any climate, be left exposed to the action of sun or rain, and so long as the container was intact, the food, if perfectly sterilized, was properly conserved. The Civil War with its great requirements of preserved foods for the armies gave a big impetus to the business, and later improvements in the methods of sterilization and in can-making greatly increased its scope until we have the enormous industry of today.

While this has been going on, there has been also a tremendous development in the preservation of foods by cold storage and by other physical means, such as pasteurization, salting, etc. With all the expansion along these lines, drying was practically forgotten, except on a domestic scale and in the dry valleys of the Pacific slope, where the fruits could be preserved very conveniently by this method by action of the sun.

The drying of potatoes and other vegetables on a semi-commercial scale was first done apparently by A. F. Spawn, an American resident in Australia in 1886, but the industry did not make a business success.

At the time of the discovery of gold in the Klondike, the rush of miners to that district created a demand for foods which were light and could be easily transported, and dried potatoes imported from Germany were sold the miners in considerable quantity. These were restored for use by soaking in water and could be served in the form of hashed or fried potatoes, and while they were not extremely palatable, they did supply a quickly prepared and energy-giving ration for the hard-working miner.

Noting the success of the German product, some attempts were made to manufacture dried potatoes in Oregon and Washington, but these were far from successful at first, because the manufacturers used sulphur as a means of preventing the darken-

ing of the slices of potatoes before drying, the amount of sulphur being entirely too great, with the result that the taste of the potato and the odor when cooking was very objectionable. This, however, was shortly overcome, and dried potatoes were manufactured in this country, though even this was far from modern dehydration.

When we speak of "modern" dehydration we mean foods which either with or without previous treatment have been subjected to the action of carefully regulated currents of air in which the temperature and humidity are both properly controlled, a process which results in the food product gradually losing water, but without giving up its color or flavor or having its cellular structure impaired. The modern dehydrated product, therefore, will reabsorb water, swelling to its normal size and appearance, and, when cooked, will have essentially the flavor, appearance, and odor of freshly cooked material made from the fresh vegetables. The early products were far from meeting these requirements, and the same is true of many made at the present time. When the White Fleet went on its famous voyage around the world, a large quantity of dehydrated vegetables was purchased for the use of the fleet. These were so objectionable as a result of improper methods of dehydration, which had produced blackening and scorching, that they were practically uneatable and hundreds of pounds were thrown overboard. Not only was there a considerable loss at that time, but there was also created in the minds of the officers of the Navy a strong prejudice against any foods prepared by this method, a prejudice which has existed until the present day. However, progress was bound to come, and the best dehydrated products of the present day will meet every requirement which it is desired to impose upon them as regards appearance, flavor, and quality.

THE DRYING INDUSTRY STIMULATED BY WAR

War seems to be a great stimulator of methods of food preservation. Just as the Civil War stimulated the canning industry, so the Boer War, and, to a great extent, the European War, stimulated the drying industry. During the Boer War the British Army in South Africa was supplied with thousands of pounds of dried vegetables mixed so as to form the basis for a nutritious and quickly prepared soup. Much of this material

was manufactured in Canada and shipped from Canadian or American points to South Africa. With the closing of the war, one of the manufacturers was left with several thousand pounds of such a soup mixture for which there was no local sale in the domestic markets, possibly owing to the fact that the average consumer much preferred to buy vegetables in the fresh state, and possibly because the mixture was not ideal from the standpoint of flavor and palatability. However, this material was not thrown away, but was put up in barrels which were carefully paraffined and stored away. After the outbreak of the European War in 1914, they were sent to the British Army and utilized in the preparation of soups just as the bulk of the lot had been used fifteen years before. I cite this as an example of the keeping quality of dehydrated products, provided storage conditions are satisfactory, and that moisture and insect pests are prevented from gaining access to the food substances.

BEGINNING OF THE DRYING INDUSTRY IN THE UNITED STATES

By 1910, a number of small factories had begun to manufacture the dehydrated vegetables and soup mixture in the United States. They had not proved highly satisfactory from the commercial standpoint. However, the soundness of the fundamental principle was recognized, and improvement was then merely a matter of applying scientific methods and perfecting details. With the outbreak of the world war came a demand for more of these products for the armies abroad, and thousands of tons were sent. With our own entrance into the war came the question of supplying these materials to our own forces. At first there was merely no objection. Then came a willingness to purchase a small amount as an emergency supply of food materials, and finally, during the past year, there has been a demand for large quantities of these dried vegetables to take the place of the fresh ones which could not be obtained in sufficient quantity in England and France. The result is that during the past twelve months many thousand tons of dried vegetables and soup mixtures have been purchased for the use of the American armies.

Let us see how our opponents in the war have taken advantage of this process. In 1898 there were in Germany only three small drying plants with an output large enough to be worth mention-

ing. This method of preservation may be regarded as apparently successful, for in 1906 the number of plants in operation had increased to 39, in 1909 to 199, in 1914 to 488, and in 1916 to 841. In addition to this, 2,000 breweries were utilizing some portion of their equipment in the drying of food materials. It is stated that in 1917 about 1,900 plants were in operation, or under construction, and the total quantity of potatoes alone dried in Germany was more than three times the total crop of the United States. These facts will explain one of the reasons why Germany was able to maintain her food supplies during the war. The German product was not as good as the best American product of today, and we have little reason to doubt, therefore, that if insistence is laid upon the high quality of the raw material and the use only of the best methods, the dehydrated vegetables industry in the United States will develop at a rapid rate and become a powerful factor in the conservation movement and in the stabilization of agricultural crops.

DEHYDRATING SYSTEMS IN THE UNITED STATES

There are now in this country probably twenty-five small plants operating on dehydrated vegetables. Several methods are in use, but in all the fundamental intent is the same, namely, to remove the excess of water so as to obtain a product which will keep for a long period of time, which will not undergo spoilage as a result of microbic action or other form of chemical change, and which will conserve the food value of the materials intact. The basic principle of dehydration is extremely simple, since it implies only the removal of the water contained in and between the cells of the food substance, with the result that the stored food materials, salts, etc., are concentrated in direct ratio to the water evaporated.

Since only replaceable water is taken away, it follows that the nutritional value of the food has not been depreciated. Moreover, if the process is applied while the vegetables and fruits are still in a state of absolute freshness, the special flavor-giving compounds are apparently conserved intact, hence the "fresh" flavor which is characteristic of the best products made by this method. For the finest grades of dried products the rate of evaporation should be such as to bring about the dehydration of the cell-contents without rupture of the cell walls.

By this means the weight of the food is reduced from 80 per cent to 90 per cent, depending on its character, and the bulk is in general diminished to one-fourth or one-sixth of the original volume. By a suitable process of compression the nearly dried material may be brought to a very compact form. Not all the water is driven off, there remaining generally from 7 to 12 or even 15 per cent. It is an advantage to secure quite thorough drying, and in general the water content of dehydrated vegetables should not exceed 10 per cent by weight. Complete removal makes the absorption of water in preparation for cooking extremely slow, while too high a percentage increases weight unduly and also renders the foods more subject to slow deterioration, due to action of moulds, bacteria or intracellular changes, or to slow oxidative changes.

The method of preparation affects in some measure the quality of the product. If the drying is begun at too high a temperature or goes on too rapidly, certain physical or chemical changes seem to take place in some kinds of vegetables whereby the water-absorbing power is impaired. If the initial temperature applied to the fresh (wet) material is too high, a process analogous to scalding or scorching results in some instances. In drying vegetables, therefore, the proper principle seems to be to subject the fresh material to air of relatively low temperature (100 to 120 degrees) and relatively high humidity, and to bring it gradually to a high temperature and low humidity. The specifications for dehydrated foods might well be so drawn as to require the applications of this procedure. The methods now in use may be classified as follows:

1. *Tunnel Systems.* These, as the name would imply, consist of long chambers or tunnels into which the prepared vegetables are introduced on screens or racks and through which a strong current of dry air is blown. There are a number of slight modifications in the arrangements of the screens and in the method of heating and driving the air, but in the majority of cases the heat is supplied by extensive coils of steam pipe, and the air is forced through by means of powerful fans. In some instances the racks holding the vegetables are placed on trucks which run on tracks, so that the material is introduced at one end and delivered in dry form from the other end. In other cases the tunnels have side entrances

and the trays are inserted and removed by hand. The weak point of the tunnel system lies in the fact that there is not absolute control of the physical conditions and as a result many vegetables, especially potatoes, are likely to be overheated and scorched, and more or less broken down in their cellular structure.

2. *Kilns.* The second type of plant may be described as kilns. These are based on the construction of the hop kiln as employed in California and Oregon and to some extent in New York State for the drying of hops and the evaporation of apples. They consist essentially of square chambers with sloping roofs and perforated floors, heated from below by means of stoves or furnaces. The vegetables to be dried are spread on the floor to a depth of four to six inches and the hot air from the stove passes up through the layer, taking away the moisture, which is conducted from the chamber through a ventilator in the roof. The material on the floor must be stirred up, or turned over, from time to time, and this is ordinarily accomplished by men with shovels. The products of the kilns are rather varied in character. Some are quite satisfactory, while on the other hand, others are very much overheated, or may go to the other extreme and be underdried. A lack of uniformity is therefore likely to be found in products of this method.

3. *Vacuum Process.* A third type is the vacuum process, which consists of closed chambers with large numbers of shelves heated by steam and with a greatly reduced atmospheric pressure. By the constant application of the vacuum to the process the water vapor is removed and the material dehydrated. This process gives excellent results for many kinds of products, but is rather severe and tends to break down the cellular structure.

4. *Special Machines.* Special types of chambers or machines have been invented and are now in use in a number of places, the air passing through the chamber being conditioned so as to bring about a carefully regulated drying. Other special types of machines force the rapidity of drying, but have not the careful regulation which seems to be essential in the preparation of the finest products. As a result, therefore, it may be stated that only in those processes where we have the practically perfect control of temperature, humidity, and rate of air flow do we get products which will retain their color, appearance, and flavor,

and when soaked in water will return to approximately the normal appearance. If the temperature is too high, overcooking takes place. If it is too low, the evaporation is insufficient and changes are likely to follow in the partially dried material. If it is too dry and too hot, destruction of the cellular structure is practically sure to follow. It is seen, therefore, that modern dehydration means the scientific control and coördination of the three factors of air, temperature, and moisture.

In England and France dehydration has been practiced, and factories are now in operation. The demand for these foods has, however, required large importations from Canada and to a lesser degree from the United States. In fact, it may be stated that this method of food preservation seems destined to be the next big advance in the development of our food industries.

ADVANTAGES OF DEHYDRATION

The advantages of dehydration are almost too obvious to require extended statement. Most evident of all is the loss in weight. All the vegetables in common use contain from 65 to 95 per cent of water. The dehydrated product made from these vegetables should contain from 5 to 10 per cent of water. There is, therefore, a very large reduction in weight and consequent saving in the transportation charges, which in general are based upon weight.

Similarly, there is a loss in bulk amounting to from 50 to 80 per cent of that of the raw material. The importance of these factors to railroads in times of congestion such as we have just passed through, or to ships in overseas service, is very evident. In sending food to our armies abroad, one ship could easily carry the vegetable requirements which in the green or fresh state would take from ten to twenty-five ships.

From the standpoint of agriculture the greatest advantage of dehydration undoubtedly appears in the stabilization of crops and the conservation of materials. Under the present conditions we are confronted by either a feast or a famine. If we consider potatoes as the most typical root crop, it is a matter of experience that a year in which we get a very large harvest and consequently low prices is likely to be followed by a lean year with a small crop and high prices. This pendulum swing goes on decade after

decade. With dehydration the excess of the years of great yield can be stored up and made available in the following years when prices are higher and the crop much smaller. After a short time this would tend to equalize the amount of planting, and, other things being equal, to give us year by year a sufficient quantity of food materials at normal prices.

The second great advantage is in the conservation of food materials. It is estimated that over 50 per cent of the fruits and vegetables grown in this country now never reach the consumer, as a result of poor transportation facilities, irregularities in marketing, or other causes. By making use of the process of dehydration, the second-quality materials could be preserved by drying, and made available for human food. For example, potatoes of class 2 and 3 (culls) could be used for the manufacture of dehydrated potato and potato flour, a product which has not yet received in this country the attention which it deserves, but which is now being manufactured to some extent in a number of different parts of the country.

A third factor of importance in the relation of dehydration to agriculture lies in the fact that a better diversity of crops can be secured, and as a result of this there will be a good variety of the vegetables which are the equivalent of fresh materials available to poor and rich throughout the year. This means better feeding for the people at large, an evening up of prices, and the prevention of famine or great food shortage as a result of poor crops in any particular location.

The general advantages of this method of treatment for vegetables and fruits maybe summarized as follows:

- a. Possibility of utilizing much food now wasted owing to low prices at time of production or difficulty in marketing;
- b. The plants for treatment can be located at centers of production and dehydration carried on while the food material is in prime condition;
- c. Saving in cost of transportation in dehydrated form due to less weight and bulk;
- d. Increased keeping qualities;
- e. Nutritional values fully conserved;
- f. No loss by crushing or spoilage;
- g. Uniformity of quality;
- h. Saving in cold storage charges;
- i. Saving in tonnage for overseas and transcontinental shipment;
- j. Foods require only soaking before cooking;
- k. Surplus of one season or locality made available at another time or place.

From the standpoint of army subsistence these general advantages imply:

- a. Lower cost of actual food units;
- b. Lower cost of transportation;
- c. Guaranteed keeping quality;
- d. No loss by freezing or spoilage;
- e. Saving in storage;
- f. Wider range of vegetable foods and consequently
- g. Generally improved diet.

While experiments on the best conditions for storage and packing are still being carried on, it is known that these products will retain their good qualities for long periods and under widely different conditions, and that when properly prepared they have the appearance and flavor of fresh materials to a marked degree.

They also seem to possess the essential special properties of substances which render fresh vegetable foods so desirable as antiscorbutics⁵ and growth promoters. Trials on both large and small scale at hospitals, training camps and in hotels have led to the conclusion that these foods are especially satisfactory in these practical tests although comment on all has generally been favorable. Distinctly satisfactory reports have been received from the Walter Reed Hospital where at the suggestion of the Food Division, the vegetables were served in the hospital mess and the officers' mess, and from the Medical Officers' Training Camp, Fort Oglethorpe, where the soup mixture was issued for a week or ten days without the knowledge of the consumers, and the verdict was unanimous that the soup during this period was superior to that served hitherto.

The disadvantages in the use of these materials are few and of minor importance. The principal one seems to be that a rather prolonged soaking previous to cooking is necessary for the best results and that slightly longer cooking than with fresh vegetables is required. An intelligent cook quickly learns the treatment essential to ensure the fresh flavor and palatableness which are attainable by proper handling.

REDUCTION IN WEIGHT AND BULK OF VEGETABLES UPON DRYING

The actual reduction in weight obviously depends on the degree of dehydration effected. The following figures have been ob-

tained from a variety of sources and are reasonably reliable although they have not been checked by our own analyses:

String beans.....	10.4	lbs. fresh produce	1 lb. dried.		
Spinach.....	13.3	"	"	"	"
Sweet potato.....	4.6	"	"	"	"
Beets.....	7.1	"	"	"	"
Onions.....	11.4	"	"	"	"
Cabbage.....	12.0	"	"	"	"
Turnips.....	8.8	"	"	"	"
Tomatoes.....	13.3	"	"	"	"
Carrots.....	6.6	"	"	"	"
Potatoes.....	4.4	"	"	"	"

If dried to a moisture content of 8 per cent the following approximate weights of dried material should be obtained per ton of fresh material:

Beans, green.....	250	lbs.
Cabbage.....	215	"
Carrots.....	292	"
Corn (green).....	465	"
Lettuce.....	114	"
Peas (green).....	350	"
Potato, white.....	450	"
Potato, sweet.....	513	"
Spinach.....	166	"
Tomatoes.....	125	"
Turnips.....	225	"

Data on the reduction in bulk are less easily obtained, and vary greatly since the products are more or less subject to compression in packing. The importance of this will be later mentioned. A few figures are quoted:

String beans.....	reduced to $\frac{1}{2}$ original volume.
Spinach.....	" " " " "
Onions.....	" " $\frac{1}{8}$ " "
Tomatoes.....	" " $\frac{1}{15}$ " "
Beets.....	" " $\frac{1}{16}$ " "
Potato, white.....	" " $\frac{1}{2}-\frac{1}{3}$ " "
Potato, sweet.....	" " $\frac{1}{2}$ " "

A more definite unit of measurement for these dried foods is the weight per cubic foot. Expressed in this way the figures are not always in exact agreement owing to differences in the percentage of water. As representative of the product in general,

the following figures are given, the material being loosely packed in cartons or barrels:

Bentz Product	Lbs. per cubic foot
Potatoes.....	24
Carrots.....	18.7
Turnips.....	19
Cabbage.....	11
Onions.....	11
Soup mixture.....	20
Horst Product	
Potatoes.....	14-15
Onion, steamed.....	9.75
Turnips, steamed.....	10-11.6
Turnips, unsteamed.....	9
Brussels sprouts.....	10
Carrots, unsteamed.....	15
Carrots, steamed.....	15.75
Cabbage.....	8.25
Beans, white, partly cooked.....	26.25
Soup mixture.....	15

An examination of several different makes of dried potatoes, prepared in a number of forms, has given me the following results:

Maker	Form	Lbs. per cubic foot
Dominion	Sliced	21
Chilliwick	Shredded	20.4
Pitcher	Sliced	18.3
Pitcher	Granulated	25.8
Bentz	Cubes	24
Horst	Quartered	16

The practical importance of this matter lies in the fact that in the loosely packed form the weight per shipping ton of 40 cubic feet is relatively low, and while a considerable saving in freight charges is to be secured by sending the dried rather than the fresh or canned material, it seems possible to make a still further saving in this respect.

The following figures express the weights of dried material per shipping ton (40 cu. ft.):

String beans.....	409 lbs. equal to about 4,000 lbs. fresh material.
Spinach.....	125 " " " " 1,650 " " "
Onions.....	400-450 " " " " 4,000 " " "
Turnips.....	760 " " " " 7,000 " " "
Carrots.....	481 " " " " 3,500 " " "

Cabbage.....	265	lbs. equal to about 4,200 lbs. fresh material.
Potato, slices.....	700	" " " " 3,000 " " "
Potato, cubes.....	960	" " " " 4,000 " " "
Potato, granulated.....	1,025	" " " " 4,200 " " "
Potato, sweet.....	640	" " " " 2,950 " " "

Modifications in the process of manufacture are practicable by which many of the vegetables may be prepared in compressed form and in this condition have approximately the same specific gravity as water or slightly higher. The advantage of this procedure is evident from the shipping standpoint as it not only reduces the bulk very greatly, bringing the material to a very satisfactory density for shipment, but it brings about a still further saving in containers, packing, etc.

NUTRITIVE VALUE OF DEHYDRATED FOODS

Since nothing but replaceable water has been removed from the foods, they contain all the food combinations and food values of the original materials. It is not, however, suggested that those dehydrated products should take the place of fresh vegetables when the latter can be secured in plentiful amounts and prime condition at reasonable prices. On the other hand, they are entirely superior to old, heated or wilted vegetables or those which have undergone deterioration by freezing or action of fungi or bacteria, and their advantages from this standpoint need no further argument.

A few analyses of dehydrated vegetables are appended in order to show that the foods are still normal in character and food value and to demonstrate the great saving in weight and bulk due to loss of water.

These analyses agree fairly closely with the theoretical figures calculated from the average analyses given by Atwater and Bryant. Some variation in analyses is expected owing to actual differences in composition with different varieties of vegetable and types of soil.

Some calculated analyses based on a 10 per cent water content are here given for comparison. Especial attention is called to the actual fuel value per pound and the rate of fuel value in the fresh and the dehydrated product. While these are calculated rather than actually obtained by analysis, they nevertheless

ANALYTICAL DATA ON DRIED VEGETABLES

	Lab. num- ber	% Mois- ture	% Ash	% Protein	% Crude fiber	% Ether ex- tract	% Carbo- hydrate (by diff.)	Cal. 100 gms.	Cal. 1 lb.
Onions	1	5.61	4.10	12.25	5.06	1.76	68.22		
	8	6.97	3.42	13.12	4.96	.72	70.81		
	3038	5.36	3.25	11.37	5.81	1.23	74.98		
		5.98	3.59	13.25	4.58	1.24	71.34	358	1625
Average			3.82	14.10	4.87	1.32	73.89	381	1729
Turnips	9	3.96	9.43	12.93	9.55	.78	63.35		
	3052	5.79	7.23	16.58	8.04	.25	62.11		
	3040	9.73	5.94	9.00	8.41	.47	66.45		
		6.49	7.53	12.84	8.67	.50	63.97	320	1449
Average			8.05	13.73	9.27	.53	68.42	342	1550
Carrots	3	1.71	4.53	5.26	8.72	2.17	77.61		
	6	5.44	6.07	5.87	8.25	1.24	73.13		
	3037	6.93	5.87	5.17	7.31	1.03	73.69		
		4.69	5.49	5.43	8.10	1.48	74.81	343	1554
Average			5.76	5.70	8.51	1.55	78.48	360	1631
Potatoes	2	7.90	3.89	9.72	1.83	.21	76.45		
	7	5.84	3.88	9.18	1.77	..	79.33		
	3061	4.01	3.52	10.00	1.78	.14	80.55		
		5.92	3.76	9.63	1.79	.12	78.78	364	1649
Average			4.00	10.24	1.90	.13	83.73	386	1753
Cabbage	10	4.44	6.98	19.18	8.27	.97	60.16		
	3045B	4.26	5.62	12.44	7.83	1.03	68.82		
	3046	5.20	5.61	13.56	8.11	1.28	66.24		
		4.63	6.07	15.06	8.07	1.09	65.08	339	1536
Average			6.37	15.79	8.47	1.14	68.23	353	1610
Tomatoes	4	5.17	5.57	17.25	7.28	3.33	61.38		
	11	4.02	8.66	14.18	8.51	1.71	62.92		
		4.59	7.12	15.71	7.90	2.53	62.15	343	1553
			7.46	16.47	8.28	2.65	65.14	359	1629
Parsnips	5	2.81	6.40	10.00	6.73	1.77	72.29	354	1603
			6.59	10.29	6.92	1.82	74.38	364	1651

show the general values for dehydrated foods which are entirely practicable from the manufacturing point of view:

Vegetable	% Water	% Pro- tein	% Fat	% Total car- boh.	% Fibre	% Ash	Fuel value per lb.	Ratio of fuel value
Beets, fresh, edible portion.....	87.5	1.6	0.1	9.7	0.9	1.1	215	1: 7.2
Beets, dried.....	10.0	11.5	0.7	69.8	6.5	7.9	1547	
Cabbage, fresh, edible portion.....	91.5	1.6	0.3	5.6	1.1	1.0	145	1: 10.6
Cabbage, dried.....	10.0	16.9	3.2	59.3	11.6	10.6	1536	
Carrots, fresh, edible portion.....	88.2	1.1	0.4	9.3	1.1	1.0	210	1: 7.6
Carrots, dried.....	10.0	6.4	3.1	71.0	8.4	7.6	1602	
Celery, fresh, edible portion.....	94.5	1.1	0.1	3.3	..	1.0	885	1: 15.2
Celery, dried.....	10.0	18.0	1.6	54.0	..	16.4	1391	
Corn, green, edible portion.....	75.4	3.1	1.1	19.7	0.5	0.7	470	1: 3.7
Corn, dried.....	10.0	11.3	4.0	72.1	1.8	2.6	1720	
Cucumbers, edible portion.....	95.4	0.8	0.2	3.1	0.7	0.5	60	1: 19.5
Cucumbers, dried.....	10.0	15.6	3.9	60.6	13.6	9.8	1563	
Eggplant, fresh, edible portion.....	92.9	1.2	0.3	5.1	0.8	0.5	130	1: 12.7
Eggplant, dried.....	10.0	15.2	3.8	64.6	10.1	6.3	1647	
Lettuce, fresh, edible portion.....	94.7	1.2	0.3	2.9	0.7	0.9	90	1: 17.0
Lettuce, dried.....	10.0	20.4	5.1	49.2	11.9	15.3	1528	
Okra, fresh, edible portion.....	90.2	1.6	0.2	7.4	3.4	0.6	175	1: 9.2
Okra, dried.....	10.0	14.7	1.6	67.9	31.2	5.5	1607	
Onions, fresh, edible portion.....	87.6	1.6	0.3	9.9	0.8	0.6	225	1: 7.3
Onions, dried.....	10.0	11.6	2.2	71.9	5.8	4.4	1634	
Parsnips, fresh, edible portion.....	83.0	1.6	0.5	13.5	2.5	1.4	300	1: 5.3
Parsnips, dried.....	10.0	8.5	2.6	71.4	13.2	7.4	1587	
Peas, green, edible portion.....	74.6	7.0	0.5	16.9	1.7	1.0	465	1: 3.5
Peas, dried.....	10.0	24.8	1.8	59.8	6.0	3.5	1646	
Potatoes, fresh, edible portion.....	78.3	2.2	0.1	18.4	0.4	1.0	385	1: 4.1
Potatoes, dried.....	10.0	9.1	0.4	76.4	1.7	4.2	1598	
Potatoes, evaporated, as purchased.....	7.1	8.5	0.4	80.9	..	3.1	1680	
Pumpkins, fresh, edible portion.....	93.1	1.0	0.1	5.2	1.2	0.6	120	1: 13.0
Pumpkins, dried.....	10.0	13.0	1.3	67.8	15.6	7.8	1565	
Spinach, fresh, as purchased.....	92.3	2.1	0.3	3.2	0.9	2.1	110	1: 11.7
Spinach, dried.....	10.0	24.5	3.5	37.4	10.5	24.5	1286	
Squash, fresh, edible portion.....	88.3	1.4	0.5	9.0	0.8	0.8	215	1: 7.7
Squash, dried.....	10.0	10.8	3.8	69.2	6.2	6.2	1653	
Tomatoes, fresh, as purchased.....	94.3	0.9	0.4	3.9	0.6	0.5	105	1: 15.8
Tomatoes, dried.....	10.0	14.2	6.3	61.6	9.5	7.9	1658	
Turnips, fresh, edible portion.....	89.6	1.3	0.2	8.1	1.3	0.8	185	1: 8.7
Turnips, dried.....	10.0	11.2	1.7	70.1	11.2	6.9	1600	

OTHER PRODUCTS FOR COMPARISON—O. E. S. Bul. 28, Revised

Potatoes, sweet, fresh, edible portion.....	69.0	1.8	0.7	27.4	1.3	1.1	570	
Potatoes, sweet, dried.....	10.0	5.22	2.03	79.5	3.8	3.2	1653	

The keeping qualities of these materials is limited only by the lack of observance of care in preparation and storage. Moisture is necessary for the development of molds and bacteria, the great agencies of food deterioration, and so long as the foods are well dehydrated and have been kept so that no moisture is absorbed, they seem to keep in good condition. The most striking illustration of the keeping quality of dried vegetables is the reported saving of some 30,000 pounds of material dried for the British Forces during the Boer War until the outbreak of the present war in 1914, when the vegetables were used with satisfaction in the English army.

The food preparations made by the various methods have shown considerable variation in character and appearance. Differences in the rate of water absorption and the appearance of the pieces after swelling are noted. Aside from these physical differences, it is worth while to consider the sanitary aspect. In most cases there is a partial but probably not complete sterilization. In the mechanical processes much handling is eliminated, so that objections arising from that source are circumvented.

An extensive investigation of the keeping quality under different conditions of storage and different types of containers has been made under the writer's direction. This has shown that with good products in suitable containers there is no deterioration even when the foods are stored for months under the most adverse conditions of temperature and moisture. Without doubt this phase of the problem will be adequately met as the industry develops.

COMPARISON WITH CANNED VEGETABLES

A practical question at once arises as to the comparative utility of dehydrated and canned vegetables. The answer to this question requires consideration not merely of food values and availability, but also of relative cost of manufacture, relative cost of tin cans and packing cases, and relative cost of transportation. The cost of raw material alone would be essentially the same.

Vegetables may be conveniently grouped into two classes: (1) Those ordinarily canned, but also dried successfully, including peas, string beans, lima beans, tomatoes, beets, corn, pumpkin, spinach, cabbage, and sweet potato. (2) Those rarely or never

canned, but well adapted to drying, as potatoes, turnips, carrots, parsnips, celery, onions, and sprouts.

Comparisons should be made, therefore, only with the vegetables of class 1. These products are now canned in enormous quantities annually as shown by the following figures for 1917, which have been supplied to me as advance information from official sources:

	Cases		Cans
Tomatoes.....	15,076,074	=	361,825,776
Corn.....	10,802,952	=	259,270,848
Beans (all kinds).....	4,486,070	=	107,665,080
Beets.....	739,565	=	17,749,560
Spinach.....	332,305	=	7,975,320
Squash and pumpkin.....	1,065,483	=	25,571,592
Sweet potato.....	238,250	=	5,718,000
Cabbage and kraut.....	1,493,122	=	35,834,928
Peas.....	9,829,153	=	236,899,672
Apples, apricots, peaches, pears.....	6,725,568	=	161,413,632

Since each individual can requires the use of from five to seven ounces of tin plate for the container, the saving in expense from this source alone is enormous. A less, but still noteworthy saving, would also be effected in packing cases. The third great advantage is in the transportation charges. Since the canned foods never contain less water than the fresh food and frequently contain an even higher percentage, it is seen that an undue proportion of the expense of canned goods lies in the handling, canning, and transportation of water.

The following table shows the weight of food as prepared for the can, the number of cans, size of can, number of cases, and weight and volume when prepared for shipment of some of the leading lines of canned goods:

WEIGHT AND BULK OF ONE TON OF VARIOUS VEGETABLES WHEN CANNED

Vegetable	Weight prepared	No. cans	Size	No. cases	Cu. ft. ready to ship	Total weight ready to ship
Corn.....	750 lbs.	740	2	31	31.77	1426 lbs.
Peas.....	1960 "	2240	2	93.3	95.63	4291 "
String beans.....	1500 "	2000	2	83.3	85.38	3832 "
Lima beans.....	800 "	1200	2	50	51.25	2300 "
Tomatoes.....	1100 "	535	3	22½	38.41	1763 "
Pumpkin.....	1400 "	700	3	29	49.88	2146 "
Sweet potatoes.....	1450 "	720	3	30	51.60	2250 "
Cabbage.....	1450 "	800	3	33	56.76	2400 "
Sliced vegetables.....	1600 "	267	10	45	55.80	2700 "

Reference to the table on page 60 of this report shows the weights of dried products of these same vegetables to be per ton:

Corn.....	465 lbs.
Peas.....	350 "
String beans.....	200 " about
Green beans.....	250 "
Tomatoes.....	125 "
Pumpkin.....	200 "
Sweet potato.....	513 "
Cabbage.....	215 "

A recent report on an analysis of dried tomatoes for moisture and solids, brought out the statement that one pound of the product with a water content of 7.4 per cent was equivalent to 10½ two-pound cans of solid pack Del Monte Brand tomatoes containing 5.02 per cent solids.

The saving to be effected by use of dried products is indicated by the estimated cost of canned and dried tomatoes shipped from California to France. It is stated that a case of canned tomatoes, costing \$2.60 in California, costs \$7 laid down in Havre. The equivalent amount of dried tomatoes selling 26 cents per pound in California, costs 40.5 cents in France, a saving of \$6.595 or 94 per cent. While this is probably the most favorable case that could be cited it is certain that very large savings could be made in every line where dried products can replace canned ones. At the present day the value of the food substance in the can is but a fraction of the cost of labor, containers, packing cases and transportation charges.

COMPARISON OF DRIED AND CANNED FRUITS

What has been said of canned and dried vegetables applies also to fruits. Without discussing the whole problem it may be of interest and value to show the comparison between the dried fruits of the types at present on the markets and the same foods when canned.

YIELD PER TON OF FRUIT

Fruit	Weight prepared for canning	No. cans	Size	Cases	Cu. ft. boxed	Total weight boxed
Apples.....	1400 lbs.	1066	2½	44	66	2640
Peaches.....	1500 "	1143	2½	47½	71.25	2850
Apricots.....	1500 "	1143	2½	47½	71.25	2850
Pears.....	1500 "	1143	2½	47½	71.25	2850

Each can of these products contains 21 ounces of fruit and 8 ounces of syrup. The fruit contains on an average more than 85 per cent water. The actual weight of solids in each can is, therefore, small. The dried products are, on the other hand, about 80 per cent solids and 20 per cent water.

On a basis of actual food units (calories) we find, therefore, that the dried fruits have about the following comparative values per ton of fresh material:

	Canned			Dried		
	Weight water	Weight solids	Calories per lb.	Weight water	Weight solids	Calories per lb.
Apples.....	1184.4	215.6	290	308	1092	1380
Peaches.....	1321	179	220	285	1215	962
Apricots.....	1221	279	340	300	1200	1344
Pears.....	1216	284	355	323.5	1176.5	1180
Prunes.....	....	...	...	...	....	1430
Raisins.....	....	...	...	...	....	1534

Comparing weight and bulk when packed for shipment, we have the following figures:

Fruit	Canned		Dried	
	Weight boxed	Volume boxed	Weight boxed	Volume boxed
Apricots.....	71.25	....	37.35
Peaches.....	71.25	....	37.35
Pears.....	71.25	....	37.35

The work in commercial dehydration is still in its early stages in this country. There are many problems yet to be determined. We are now attempting to find out which processes are best adapted for general use, whether dehydrated products are deficient in any of the nutritive principles which they should possess and which the fresh vegetables themselves possess, to work out satisfactory methods of storage and transportation by selecting the best types of containers, and to acquaint the consumer, especially in the cities, with the great advantages which are likely to be gained by the use of dehydrated products.

Obviously, dehydration will succeed commercially only in those regions with abundant crops which can be contracted for at planting for a guaranteed price, or in centers having a short haul from the point of production and suitable shipping facilities. If, however, the problem is met scientifically there appears no reason to doubt that a demand will be created and that dehydration will become, as canning has, a great industry of immense importance to agriculture, with the further advantage that no tin plate will be required and that the consumer will purchase practically nothing but food material, whereas in the purchase of canned goods he is buying and the railroads are shipping enormous quantities of water.

In order to insure a successful industry, dehydrated products must have the quality which will make them the practical equivalent of the fresh materials. They must be handled in a sanitary manner; be put up in suitable packages, and sold at a price which will make them throughout the year comparable with fresh vegetables. We believe this can be done, and that dehydration will become the servant of agriculture as well as of the dwellers in the great cities.

Economic Aspects of the World Mineral Situation

By ALFRED G. WHITE*

Bureau of Mines, Washington, D. C.

THE results of the Peace Conference will largely determine the future of nations. Each nation, whatever its present state of development, ultimately hopes to rise in the industrial scale from a producer and exporter of crude raw materials to the position of greater wealth and higher organization attained by a manufacturing nation. The control of natural resources is one of the important factors under consideration. Resources are very unevenly distributed and the control of one important world product is a diplomatic asset to the nation possessing it. Danger of too great dependence upon other countries has been emphasized by the war. Such dependence has involved the diversion from military service of the ship tonnage required for the actual import of the materials, for the return movement of fuel, equipment and supplies required in their production, and for the transportation of other less essential products insisted upon by the nations possessing them. In addition to the sacrifice of shipping and to the uncertainty of supply, the importation of bulky raw materials has overtaxed port facilities and has required increased financial credits in purchasing materials abroad. During the war, essential supplies of raw materials were cut off and many nations were forced to attempt to develop their home resources, even under unfavorable conditions. The continuation of this attempt may no longer be necessary if world security and peace can be permanently established and an equitable distribution of raw materials assured.

THE IMPORTANCE OF MINERALS

The war has greatly emphasized the importance of minerals, which rank with foods and textiles among the great and essential groups of raw materials. The fuels, iron and steel, copper, lead,

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and zinc were fundamental materials. In addition there is a smaller group of "War Minerals" whose importance is far greater than either their tonnage or value would indicate. The two fundamental materials for the production of all modern high-power explosives are nitrate used chiefly in the form of nitric acid, and concentrated sulphuric acid made from pyrite or sulphur. Manganese is the most essential alloy for high-grade steel for munitions and important industrial uses. Tungsten and molybdenum are essential alloys for tool steel. Flake graphite is used for crucibles required in the production of brass and crucible steel. Tin is required for tin-plate for utensils and cans for preserving food and for bearing metal. Quicksilver is used as fulminate to explode cartridges and shells, and is essential for the safe and effective use of high-explosives. Potash is used chiefly for fertilizer. Antimony is required for hardening lead for bullets. Chromite is used to make an alloy for tool steel, for tanning leather, and as a refractory lining in basic open hearth steel furnaces. Magnesite is used as a refractory in metallurgical furnaces. Mica is indispensable as an insulating material in the manufacture of electrical apparatus. Platinum is important as a "contact" material in the manufacture of sulphuric acid for explosives.

The annual production of the more important minerals approximated about 1,800,000,000 short tons prior to the outbreak of the European war. This does not include a number of minerals of more or less local significance, such as stone, cement, sand, and gravel. The relative weight of the various minerals produced in 1913, reduced to short tons, is as follows:

Coal.....	1,480,000,000
Iron Ore.....	195,000,000
Oil.....	55,000,000
Salt.....	24,000,000
Potash Salts.....	13,000,000
Phosphate Rock.....	7,000,000
Pyrite.....	6,600,000
Oil Shale.....	4,000,000
Nitrate.....	3,100,000
Manganese Ore.....	2,600,000
Lead.....	1,300,000
Copper.....	1,100,000

Zinc	1,100,000
Sulphur	800,000
Bauxite	600,000
Crude Magnesite	600,000
Chromite	200,000
Asbestos	180,000
Tin	140,000
Graphite	140,000
Nickel	32,000
Antimony	27,000
Arsenic	16,000
Silver	9,320
Tungsten	9,000
Quicksilver	4,400
Sheet-Mica	4,000
Vanadium	1,240
Gold	912
Molybdenum	244
Platinum	11

These figures of relative bulk must be kept in mind as the further discussion will deal with percentages of output. While one per cent of the world's coal output represents approximately 15,000,000 tons, one per cent of the world's production of platinum is only a small fraction of a ton.

For purposes of general discussion minerals may be grouped under three heads: fuels, metals, and non-metallic minerals.

I. FUELS

The principal minerals in this group are coal, petroleum (including shale oil), and natural gas. Considerable amounts of peat are used as fuel, but under present conditions it is of local significance.

Coal represents by far the largest tonnage in the mineral group. It may be divided into three sub-groups, anthracite, bituminous, and lignite. The anthracite is of principal significance as a smokeless domestic fuel. Bituminous is further divided into two significant groups, coking and non-coking. Coking coal is required in the principal metallurgical operations and is important in the

development of smelting industries. Non-coking bituminous coal is used for power and industrial purposes, for railroad and bunker purposes, and in the absence of anthracite for domestic purposes. It represents the principal coal used for export purposes. Lignite coals are of lower grade and are generally restricted to local consumption.

Europe and North America are the principal coal producing continents. The 1913 production was as follows: United States, 39 per cent; Great Britain, 32 per cent; Germany, 21 per cent; Austria, 4 per cent; France, 3 per cent; Russia, 2 per cent; Belgium, 2 per cent; Japan, 2 per cent; India, 1 per cent; China, 1 per cent; Australia, 1 per cent; Canada, 1 per cent; and all others 1 per cent. Great Britain, Germany, and the United States were the principal exporting nations, with a smaller amount from Japan and Australia. Practically all the other important producers used their production for home consumption and required additional imports. Most of the principal producers are capable of continuing production for a considerable period of time. The great future reserves of the world are held by the United States with one-half of the total, Canada with one-sixth, and China with one-seventh. Great Britain's reserves are smaller, but of the highest average quality. A considerable part of the world's reserves consist of the lower grade lignite coals. The net effect of the war on the coal industry was to cut off the German export, to cause a decline of over 20 per cent in the British export, and to considerably increase the export from the United States to both Europe and South America.

Soon after the beginning of the war, Germany increased her control over coal resources by the capture of fields producing about one-half the French output, by the capture of all of the Belgian coal fields, and by the capture of the coal field in Poland producing about one-fifth the total Russian supply. This increased the German and Austrian control of this important fuel by about 4 per cent. On the whole the production of coal has been less than normal since the war began. In most countries production has declined from 10 to 20 per cent except in the United States where it has increased to meet the demands incident to the manufacture of munitions and to a greater export trade.

PETROLEUM AND PETROLEUM PRODUCTS

Petroleum may be used in its crude state as fuel oil for industrial, railroad, and steamship purposes, or it may be refined into a number of products of wide significance. The principal ones are gasoline for internal combustion engines, kerosene used largely for lighting purposes, lubricating oils, residuum used as fuel oil, and asphaltum for road making. Improvements in refining and cracking processes are resulting in the recovery of a larger percentage of the high-grade products and a corresponding decrease in the amount of oil used for heavy fuel purposes. A minor but significant source of supply for oil products is the distillation of shales which has been principally developed in Scotland, but large reserves are available in the United States.

The use of petroleum and petroleum products was greatly expanded during the war. Large amounts of fuel oil were required for allied naval operations, and the demand for gasoline and motor spirit was enormously increased by the use of motor trucks, aeroplanes, submarines, and tanks.

North America and Europe are the principal petroleum producing continents. The relative importance of 1913 world production was: the United States, 64 per cent; Russia, 17 per cent; Mexico, 7 per cent; Roumania, 4 per cent; Dutch East Indies, 2 per cent; Austria, 2 per cent; India, 2 per cent, and all others 2 per cent. As far as reserves are concerned, the United States will hold its leading position for many years to come. Russia may ultimately be expected to be the leading world producer. Mexico has very extensive reserves and its production is rapidly increasing. Very large undeveloped areas of great promise are known in Persia. During the war the Russian production was available for Russia's requirements and the principal oil territory was occupied by the British after the collapse of Russia. Germany was greatly handicapped because of the small amount of petroleum available for her use. The Austrian output from Galicia was available and the Roumanian fields were later captured, but these fields were partially destroyed and were only brought back to somewhere near normal production at the close of the war. Although Germany was able to use railroad facilities to a greater extent, relied less on motor trucks, and did not have the heavy

demands for naval operations, the shortage was very keenly felt. The Allies relied largely on production from the United States and Mexico, the principal limit of supply being the shortage of tank steamers which was intensified by losses from submarine attacks. Both the United States and the Mexican production was very greatly increased and Mexico probably took second rank among the producers in 1917.

Natural gas is a very important fuel which has been principally produced in the United States. Because of the fact that it must be piped to the point of consumption, it is generally used in relatively local areas and does not enter into export or long distance transportation.

While hydro-electric power has been largely developed in many districts and comes into competition with the natural mineral fuels, it is again a matter of relatively local use and does not offer any immediate prospect of replacing the other principal fuels although it will occupy an increasing field.

II. METALS

The metal group may be divided into several sub-divisions, the largest of which is iron and steel including the steel alloys.

Iron ore takes second place among the bulky mineral products. The iron and steel industries which make use of it, have generally been located with respect to the coking coal supply, so that a nation which possesses iron and does not possess coal has not become important in steel manufacturing.

Europe and North America are the principal iron ore producing continents. The relative importance of the 1913 world production by countries was: the United States, 36 per cent; Germany, including Luxemburg, 20 per cent; France, 12 per cent; the United Kingdom, 9 per cent; Russia, 5 per cent; Spain, 5 per cent; Sweden, 4 per cent; Austria, 3 per cent; Canada, 1 per cent; Cuba, 1 per cent and all others 4 per cent. The present principal producing districts contain large reserves and no immediate shifting of the industry is probable. Brazil and China have vast reserves which have so far been little developed. Newfoundland also has large reserves which so far have been developed only on a small scale. The principal effect of the war on the iron ore situation was the seizure of a large part of the French producing districts by

Germany early in the war. With the close of the war and the probable return of the Lorraine iron deposits to France, Germany will lose practically 70 per cent of her known iron deposits representing about 60 per cent of her pre-war production, thus increasing French control from 12 to 24 per cent and decreasing German control from 20 to 8 per cent of the normal world output.

The production of pig iron in the United States increased almost one-third while that of most countries declined. This indicates the extent to which the allied nations depended on this country for war materials.

Of the steel alloys, manganese and chrome represent the minerals involving the larger tonnages. Before the war Russia produced 56 per cent of the world's manganese, India 35 per cent, and Brazil 5 per cent. The export of Russian manganese was cut off by the closing of the water route via Constantinople. The shipments from India were largely curtailed by the shortage in ocean shipping. Under these circumstances Brazil was more favorably situated, and her output increased over four fold. Before the war Rhodesia furnished 35 per cent of the output of chromite, New Caledonia 35 per cent, Russia 13 per cent, and Asiatic Turkey 8 per cent. While the principal sources of New Caledonia and Rhodesia remained available, shipments were interrupted, because of the difficulties of ocean transportation, and the situation necessitated conservation in the use of this essential mineral. Production in the United States and Canada was greatly stimulated so that at the close of the war these countries were large producers. Because of the handicap of transportation and lower grade deposits, it is doubtful whether much of this output will be permanent. Tungsten, molybdenum, vanadium, and cobalt, while important as special alloys, are produced in very small tonnages. The pre-war production of tungsten came from Asia, 28 per cent; United States, 16 per cent; Australia and New Zealand, 15 per cent; Spain and Portugal, 14 per cent, and South America, 14 per cent. Practically all of these sources remained available as the total tonnage was relatively insignificant. Under the stimulus of high war prices the world production was doubled. The United States and Australia were the principal producers of molybdenum, with Norway as third in importance. Because of the small tonnage of this alloy and its restricted use, the situation

was not greatly disturbed. Peru and the United States were the principal sources of vanadium, the former having the largest and most important deposits in the world. The production of vanadium varies considerably from year to year and the situation was not greatly disturbed. The principal supply of cobalt comes from Canada. The steel alloy group as a whole is a most significant one because of the production of special steels which are absolutely essential for such purposes as tool steel, automobile and machine parts, and munition manufacture.

NON-FERROUS METALS

The second sub-division of metals includes the principal non-ferrous metals such as copper, lead, zinc, tin, aluminum, and nickel. The tonnage involved is relatively small compared to the great variety of manufactured products into which they enter.

North America produced two-thirds of the world's copper in 1913. The United States ranked first with 56 per cent, with Japan as second with only 7 per cent, and Mexico, Spain, and Australia each 5 per cent. The rest of the production is widely scattered. The Central Powers produced only about 3 per cent of the total, and were greatly handicapped by the lack of this essential metal. The United States will probably continue to be the principal producer for many years. Outside of the United States, Chile and the Kongo Independent State have the largest known reserves. The production of copper increased by 50 per cent during the war.

North America furnished 43 per cent of the world's output of lead, Europe 30 per cent, and Australia 20 per cent. The principal countries in their order of importance were: United States, 36 per cent; Australia, 20 per cent; Spain, 16 per cent; Germany and Austria, 8 per cent, and Mexico, 5 per cent. The United States production increased 40 per cent during the war while in other countries it declined. The leading zinc producing continents were Europe, 43 per cent; North America, 36 per cent, and Australia, 15 per cent. The principal countries were: the United States, 35 per cent; Germany, 25 per cent; Australia, 15 per cent; Italy, 5 per cent, and Algeria, 3 per cent. The rest of the production was widely scattered. The principal effect of the war was the disturbance of smelting facilities, a considerable part of which was

located in Belgium and Germany. Much of the Australian concentrates had to be shipped temporarily to the United States for smelting. With regard to tin, Southern Asia and the East Indies produced 65 per cent, and Bolivia 20 per cent, with smaller amounts in Australia, England and Africa. The Central Powers have no production of this important mineral. While world transportation conditions were difficult, the tonnage was relatively small and no serious war shortage resulted although curtailment in non-essential uses was necessary. Bauxite, the ore from which aluminum is made, was produced almost entirely by two countries: France, 57 per cent, and the United States, 40 per cent. The output greatly increased due to war demands as aluminum was largely used in the construction of aeroplane and automobile parts. Canada has almost a world monopoly of nickel, producing 84 per cent, while New Caledonia produced about 11 per cent. In summarizing this important group of minerals we may observe that the Central Powers had almost no production of copper, aluminum, nickel, and tin, and were thus severely handicapped.

THE PRECIOUS METALS

The third sub-division is the precious metal group, including gold, silver, and platinum. The tonnage of the finished products is insignificant compared with their financial and industrial importance. All three of these metals have been used largely for jewelry and other less essential purposes. Gold and silver are of essential importance principally from a financial standpoint, while platinum was of special war significance because of its use in the production of sulphuric acid by the contact process and for essential parts in electrical apparatus. In 1913 South Africa was the most important gold producing section with 44 per cent of the world output, the United States was second with 19 per cent, Australasia follows with 12 per cent, Russia with 6 per cent, Canada 4 per cent, Mexico 4 per cent. The rest of the production was widely scattered. In the production of silver, North America was the leading continent with 77 per cent distributed as follows: Mexico, 32 per cent; the United States, 30 per cent, and Canada, 14 per cent. Australia was next with 8 per cent, and then Peru with 4 per cent and Germany and Austria with 3 per cent. Russia produced 93 per cent of the world's platinum, and Colombia

furnished most of the remainder. The Russian production declined during the war and was cut off after the collapse of Russia. The output of Colombia very largely increased, but the increased war demand for platinum resulted in a campaign to restrict its use for jewelry and less essential purposes. The production of both gold and silver declined to an alarming extent during the war. This was due to the increasing cost of labor and supplies for mining while the purchasing value of the product—the dollar—declined in proportion.

The fourth sub-division includes metals such as quicksilver, antimony, magnesium, radium, and a number of others of less importance. Quicksilver was of particular war importance because of its use as fulminate in connection with the detonation of high explosives. Four countries produced the larger part of the world supply before the war as follows: Spain, 31 per cent; Italy, 25 per cent; Austria, 22 per cent, and the United States, 14 per cent. The United States output largely increased during the war. China has been the principal source of antimony with a production of 53 per cent in 1913, with France second with 24 per cent, and the United States third with 8 per cent. The Chinese deposits are extensive and cheaply mined and production rapidly increased during the war. A considerable amount of the metal magnesium was produced as a light alloy for aeroplane construction. Radium has been of prime importance because of its use in the treatment of cancer. Certain compounds of radium have been largely used in luminous parts for watches and various military equipment.

III. NON-METALLIC MINERALS

The non-metallic minerals may also be sub-divided into several groups. The largest, from a standpoint of tonnage, is the building and structural group.

The minerals include stone, clay, sand, gravel, and asphalt. Secondary manufactured products are cement, brick, and pottery. These minerals are bulky and of wide distribution, therefore they are generally restricted to local markets, where they are used for building purposes, for road materials, and other structural work. Some of the higher grades of clay and stone serve special manufacturing or ornamental purposes and may be transported long distances, but these are exceptions to the general rule.

A second sub-division is the fertilizer group. The three most important minerals are nitrate, potash, and phosphate. The principal deposits of these minerals are concentrated in a few places and they largely enter into world commerce. Chile produces practically all of the output of natural nitrate. The production of artificial nitrates by various electrical and chemical processes has been expanded and probably furnished a considerable part of the German supply which was supplemented by large stocks accumulated before the war. Chile furnished the larger part of the supply required by the Allies for the manufacture of explosives. The transportation of several million tons of this material was a serious problem and resulted in considerable curtailment of its use for fertilizer. Germany had a similar monopoly control with regard to potash, producing practically all of that essential fertilizer. The world's supply was cut off with the outbreak of the European war.

A considerable development from natural deposits and from by-product sources took place in the United States so that at the end of the war a production capacity had been developed to meet one-third of the requirements. This development took place under the stimulus of very high prices and it remains to be seen how much of this industry can survive the handicap of high freight rates from the western deposits which have furnished a large part of the output.

The supply of phosphate rock comes principally from the United States, 45 per cent, and from Northern Africa, 35 per cent. France was third with only 5 per cent, with smaller amounts from Belgium, and several small islands of the Pacific. A shortage of labor and ocean shipping, together with the loss of the German market, largely decreased the total production of this material.

A third sub-division is the chemical and metallurgical group. Pyrite and sulphur are used in the manufacture of sulphuric acid, in the production of sulphite wood pulp, and for a great variety of other chemical purposes. The largest production of pyrite comes from a district in Spain, a small part of which extends into Portugal. This district furnished 61 per cent of the world's output before the war. Norway was second in importance with 8 per cent, and the rest of the production was widely scattered. A considerable increase in the United States and Canadian produc-

tion took place, but the principal war demands were met by an enormous expansion in the production of sulphur. Italy (47 per cent) and the United States (44 per cent) produced the great bulk of the world's sulphur output with the remainder of about 8 per cent coming from Japan. The production in the United States has been very rapidly increased and was almost on a par with that of Italy before the war. During the war the United States production expanded almost four fold, giving it preëminence as a world producer while the production of Italy suffered a serious decline.

Graphite and magnesite are largely used for refractory purposes in the metallurgical industry. The flake graphite is used for crucibles for melting brass and steel. Ceylon, Austria and Madagascar were the principal sources of supply before the war. The production of Madagascar was very largely increased. A large increase in the United States industry took place. Austria produced three quarters of the world output of magnesite, and when this supply was cut off at the beginning of the war, it created a problem in the steel industry where it was largely used as a refractory furnace lining. A great expansion took place in the United States industry in California and Washington, which met our requirements, while the Grecian output also was expanded so that no serious suffering resulted from the war situation. Salt is a mineral of large tonnage, very widely used for many purposes; fuller's earth, borax, barites, and arsenic are other numbers of this group.

Another sub-division includes miscellaneous minerals, such as asbestos, mica, abrasives, and others of less importance. Canada produced about 90 per cent of the world's supply of asbestos, with Russia as the country second in importance. The Canadian production has increased during the war while that of Russia has steadily declined. India produced about 60 per cent of the world's supply of sheet-mica, the larger part of the remainder coming from the United States and Canada.

WAR EFFECTS SUMMARIZED

In summarizing the effect of the war on the world mineral situation there are three subjects to be discussed: (1) the changes in the national control of minerals during the war, (2) the development

of new sources of supply of either a temporary or permanent character, and (3) the change in ownership of important resources which will probably result from the Peace Conference.

CONTROL OF MINERALS DURING THE WAR

The immediate effect of the war was a general disturbance and paralysis resulting from the closing of markets, the interruption of transportation routes for export, and a shortage of labor when the men were called to military service. A number of mineral districts of world importance were in the fighting zone and were partially destroyed, or for the time being rendered useless. The German occupation of Belgium and of large areas in France cut off an important part of the world's zinc smelting facilities, deprived France of about one-half of her normal coal supply, and cut off a large part of her iron and steel output. The loss of a large part of the market for American copper and phosphate rock which had been shipped to Germany seriously affected those industries. The exports of German coal and potash and of Austrian magnesite were stopped. With the entrance of Turkey into the war, Russian manganese ore could no longer find an outlet via Constantinople. Outside of these materials the rest of the world's mineral resources were available for the use of the Allies, but as the destruction of shipping increased, it became more and more difficult to secure a supply of the more bulky materials which had to be shipped long distances, such as coal from Europe to South America, pyrite from Spain to the United States, nitrate from Chile, manganese from India, and chromite from New Caledonia and Rhodesia.

The supply of minerals available for use by the Central Powers came principally from Germany and to a lesser extent from Austria and Turkey. Very little material was secured from the nearby neutral countries of Norway, Sweden, The Netherlands, and Switzerland, as they have few important mineral resources, although some iron ore, pyrite and copper were imported from Norway and Sweden.

Germany and Austria produced 25 per cent of the world's pre-war coal output. This supply was largely increased by the occupation of the Belgian fields, the capture of fields producing about one-half of the French output, and by the capture of the Dombrowa Basin in Poland producing about one-fifth of the total

Russian supply. With the collapse of Russia the latter control was extended over one-half the Russian output. Production from these various captured fields declined very considerably, due to their partial destruction, but undoubtedly added from 40 to 50 million tons per year to the German control of coal supplies. Germany and Austria produced 23 per cent of the world's output of iron ore which was available for war purposes. In addition a considerable part of the French ore deposits, forming an extension of the German Lorraine field, was occupied early in the war. The available supply of the world output of other major metals was lead, 8 per cent; zinc, 26 per cent, and copper, 3 per cent. The lack of copper was very keenly felt. The Central Powers produced very little of the important steel alloy minerals; namely, 1 per cent of nickel, 2 per cent tungsten, 7 per cent molybdenum, and 8 per cent of chromite from Asiatic Turkey. When her accumulated supplies of these materials were exhausted, the quality of her steel products greatly deteriorated and was a very serious handicap in producing war equipment. The lack of any natural nitrate deposits was made up by the artificial production of nitrate which was greatly increased during the war.

The supply of petroleum was very inadequate, particularly in a war where motor vehicles played such an important part. Austria produced about 2 per cent of the world's oil output, and the occupation of Roumania added about 4 per cent additional to this supply, although a considerable part of this latter amount was not available due to the destruction of the oil fields before they were seized by the Germans.

Germany was poorly supplied with raw materials for sulphuric acid, controlling only about 5 per cent of the world's pyrite output and practically no sulphur. She had a practical monopoly on the entire world's supply of potash, but had inadequate supplies of phosphate rock and nitrate, and as a result the food supply was considerably affected.

Australia and Turkey were producing about 25 per cent of the quicksilver supply so that an adequate amount was available for war demands.

In summing up the mineral situation of the enemy countries we may conclude that they had fairly adequate supplies of coal and iron, zinc, lead, potash, magnesite, and quicksilver, but were

seriously handicapped by a shortage in petroleum, copper, tin, aluminum, manganese, nickel, pyrite, sulphur, and nitrate. The shortage of these minerals and their resulting effect in the production of war munitions and food, was an important factor in the economic collapse of Germany.

NEW SOURCES OF MINERAL SUPPLY

It is difficult to forecast how permanent may be the new sources of mineral supply. The increased production of artificial nitrates will undoubtedly compete with the monopoly of the natural supply of this mineral which Chile has long enjoyed. The discovery of natural deposits of potash in Spain and the United States and the development of many by-product sources may establish new permanent competing sources. The production of platinum from Colombia has been greatly increased. The further development of the tin deposits in Bolivia and the establishment of tin smelters in the United States to handle this ore is another development of importance. The tremendous increase in the output of manganese from Brazil will undoubtedly give that country a more important position in the trade than it has held in the past. The increased production of flake graphite from Madagascar has brought that island into the foremost rank of producers of this material. The tremendous increase of the output of sulphur in the United States will strengthen the position which that material had already secured in the world's market. With the development of new smelting facilities in other countries, it is probable that Germany cannot regain her position in the zinc industry. The United States demonstrated her ability to produce many essential minerals to meet war demands, such as manganese, chromite, pyrite, magnesite, and graphite. To what extent these new industries can permanently survive is not yet apparent.

CHANGES EFFECTED BY THE PEACE CONFERENCE

Certain important facts about the ownership of mineral deposits seem fairly well determined, of which the most important is the transfer of Alsace-Lorraine to France. By this change Germany will lose three-fifths of her iron ore production, representing, in 1913, 12 per cent of the world's output. The transfer of the Alsace potash deposits will break the German monopoly of this essential

mineral. While in 1913 these deposits produced only 5 per cent of the output, and the Stassfurt deposits produced 95 per cent, the deposits are large and capable of extensive development under French control. In addition a small and important percentage of mica output from German East Africa, and of phosphate output from the Pacific Islands will probably be transferred to the control of other nations. The latest negotiations have dealt with the coal deposits of the Saar Valley, which is located in the part of Germany bordering Lorraine. If the coal output from this district is put under the control of France, it will be an important factor in supplying the fuel for the iron and steel industry which is based on the Lorraine iron ore deposits above mentioned.

The American Trade Balance and Probable Trade Tendencies

By J. RUSSELL SMITH

Professor of Industry, University of Pennsylvania.

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PERHAPS the most conspicuous thing about the foreign trade of the United States during the war has been the development of an unprecedented trade balance which has changed the United States from a debtor to a creditor nation. The significance of this change is puzzling to many people. Its influence will continue for many years, and an understanding of it is important in the development of foreign trade policy for individuals as well as nations, for the greatest single reconstruction that America faces is the reconstruction of its foreign trade.

CHANGE OF THE UNITED STATES FROM DEBTOR TO CREDITOR

Before the war the United States was always a rich field for the investment of capital because of the numerous opportunities to start enterprises offered by our undeveloped resources. This situation naturally attracted the savings of European countries, particularly Great Britain, because of the comparative lack of attractive investment opportunities in the Old World. The result was a large accumulation of American securities and other property rights in European hands. This financing of American enterprise by foreign lenders meant, in foreign trade, the export of American commodities to cover the interest payments arising from our use of outside capital. In addition the United States has been a large importer of various kinds of services. Foreign ships have carried most of our foreign trade, and most of their cargoes have been insured by foreign companies. Foreign laborers sojourning here made in the aggregate large remittances of earnings to their home countries. This wage remittance virtually constituted the import of labor services. Again, American tourists spent large sums in Europe for supplies and services. All of these items were paid for by the export of commodities from the United States.

This situation is summarized in an article in the *Commercial and Financial Chronicle* of September 21, 1918. According to this article the United States entered the war owing the world about \$5,000,000,000 in the form of securities of all descriptions and of property owned outright in the United States by non-resident foreigners. On the other side of the account were the foreign securities and other property owned by American citizens, which amounted to about one and one-half billions. This left the United States a net debtor to the extent of three and a half billion dollars. The net annual outgo to foreign countries (largely in goods, of course), after deducting reciprocal trade in commodities, was, according to the *Chronicle*, about 500 million dollars itemized as follows:

Interest on securities and other property incomes.....	\$175,000,000
Freight charges.....	25,000,000
Remittances by foreign laborers.....	125,000,000
Expenditures of American tourists abroad.....	150,000,000
Insurance premiums and sundries.....	25,000,000
Total.....	\$500,000,000

The changes in the foreign financial relations of the United States as produced by the urgency of war conditions are shown in this same article somewhat as follows:

Foreign securities and other property owned by		
Americans at beginning of war	\$1,500,000,000	
Net merchandise exportation (including gold and silver), July 1, 1914-July 1, 1918	9,265,000,000	
		<hr/> \$10,765,000,000
American securities held abroad at beginning of war		
	4,000,000,000	
Other American property owned by non-resident foreigners	1,000,000,000	
		<hr/> 5,000,000,000
<hr/>		
Present net balance in favor of the United States		\$5,765,000,000

Two factors not mentioned in the foregoing discussion are the expenditures of our soldiers and army abroad and the military supplies that the United States government will sell in Europe as it closes up its affairs there. These factors are mutually offsetting, but not measured. Another heavy American expense lies in payment for the use of European shipping.

Assuming that our foreign credit will amount to \$9,000,000,000 by the autumn of 1919, which appears possible, the *Chronicle* article analyzes the interest balance as follows:

" Formerly our annual payments of interest, less income from similar sources, amounted to about 175 million dollars. Now we shall have a net income from that source of about 450 million dollars. Formerly we paid freight abroad annually to the extent of about 25 million dollars. Now it is quite likely we shall have a substantial income from this source.

NET INCOME REPLACES NET OUTGO

"Let us assume that the other items on our annual income and outgo sheet will remain stationary, although it is quite likely that in most cases our income will be increased and our outgo decreased. However, changes in these items are not of sufficient importance to materially affect final results. The net result will be that, while formerly we had a net annual outgo of about 500 million

dollars, we shall in the future have a net annual income of about 175 million dollars."

With this amount due the United States each year what will be the course of our trade balance in the period beginning with 1920? In order to anticipate this future situation we should see recent happenings in their true light.

THE WAR A TEMPORARY TRADE EPISODE

One aspect of the situation that must affect the foreign trade balance has been too much neglected. Many persons seem to think that this world is made over commercially. It is much more nearly in the position of a ship that upsets in the storm and is then righted. The process is profoundly disturbing, but after the water is pumped out the ship goes on pretty much as before. The astonishing trade balance of the United States was produced by a temporary cause—one that in the trade sense may be called an artificial cause. The sudden transfer of the United States to the creditor column was due to an explosion in Europe—a temporary condition produced by sudden military conditions and not by the gradual working of economic forces. It did not result from any full development of resources such as has long existed between England and Canada or England and Argentina. The United States has not reached the industrial maturity that makes us a normal leader to Britain. Instead of this we had an almost universal stoppage of new industrial construction save for things contributing to the war, and the focusing of human energy on war for a period. This is a most unnatural process in trade and finance. It is equally unnatural in method of purchase. For a time European governments bought supplies here until they had plainly approached the limit of credit with private American lenders. Then the United States entered the war and threw the full force of the government and a wonderful public opinion into the raising of liberty loans. This money was loaned to European governments by the billion and spent in this country by government agencies for goods that we exported to produce the huge trade balance. We, the people of the United States, paid the producer for those goods, Europe promising to pay through our government at some date in the rather distant future. After a comparatively short period of reconstruction we will probably

stop the financing of American exports through loans from the American people to our government to be in turn loaned by it to European governments.

Trade will then come back from the political to the economic basis. What will be this basis?

THE POLICY OF INVESTING ABROAD ALL SURPLUS AND ALL INTEREST DUE

The rehabilitation of Europe, for a time at least, probably will call for continued large imports of American raw materials, and so continue our favorable trade balance and increase our foreign investments. Some financiers have gone so far as to predict that we would continue to maintain a heavy commodity export surplus and annually invest this surplus abroad, together with the interest thereon and the above-mentioned 175 million a year already due us and its annually accruing interest. One sees the fanciful nature of this prediction by noting that it is a problem in compound interest. Here is the way it would work out. Private investors in New York, London or Paris would buy the credits due the United States government and invest in South American or African mines, ranches, railways, etc. These must yield better rates than American investments, say 8 per cent, otherwise they would not be made.

AMOUNTS DUE AT END OF GIVEN PERIOD WITH GIVEN SUM INVESTED ABROAD
ANNUALLY AT 8 PER CENT AND ALL INTEREST REINVESTED
IN MILLIONS OF DOLLARS

At present	175	500	1,000
End of 1st year	189	540	1,080
End of 5th year	257	734	1,469
5-year total	1,108	3,167	6,335
End of 10th year	337	1,079	2,158
10-year total	2,737	7,822	15,645

As the prophets of indefinite investment expect the United States to invest both its war interest and the big trade surplus we must combine these factors. The 175 million and the 500 million

totals together make 4,275 million in five years, 10,559 million in ten years. The 175 million plus the billion would in five years pile up 7,443 million and in ten years 18,382 million. This is plainly fanciful.

THE POLICY OF INVESTING EXPORT SURPLUS ABROAD WITH RETURN OF INTEREST DUE

The producing capacity of the United States is doubtless such that Americans can make large investments somewhere in the next decade, but it is quite impossible that such an exclusive and constant piling up of both principal and interest abroad as above described should take place. If America continues to invest abroad after war emergencies are over we may expect the process to be gradual and the work to be done by private enterprise rather than by one government loaning to another government. Some persons will make fresh investments and even reinvest their interest. Others will take their interest and at times withdraw their capital. Suppose on the average the interest on foreign investments is regularly returned (chiefly in goods of course) but that the annual surplus of exports *over imports paid for by exports* is invested each year with returns at 8 per cent. This would give the following situation of net trade balance:—

	With Commodity Export surplus of 500 million offset by the annual 175 million of old interest and the annually accru- ing interest on 500 mil- lion dollars invested each year at 8 per cent	With Commodity Export surplus of 1,000 million offset by the annual 175 million of old interest and the annually accru- ing interest on 1,000 mil- lion dollars invested each year at 8 per cent
	Million dollars	Million dollars
1st year	325 +	825 +
2nd year	285 +	745 +
5th year	165 +	505 +
10th year	35 -	105 +
15th year	235 -	295 -

If Russia and the other European countries should have a long period of anarchy and the industrial chaos that would accompany it, we would thereby miss a great opportunity for foreign investment, especially in Russia, and, therefore, one of the greatest opportunities to maintain exports. Chaos in Europe means a quick end of big exports and a quick beginning of an import surplus—provided that our foreign investments stay good and pay their interest.

THE BASIS OF TRADE AS CHANGED BY THE WAR

When the earlier phases of reconstruction are over and the United States government ceases loaning to the European governments, American trade will come back from the political basis to the economic basis. What will this basis be? It will be the pre-war basis modified by the war changes. The war changes will be small factors in trade in comparison to the fundamental economic forces. Trade arises from differences in industry which in turn are due to differences in education of people, in the skill of workers and in their willingness to work, differences in the efficiency of industrial organization and equipment, in character of resources, in the relative abundance of those resources and in its great result, viz., differences in wages and in standard of living. These great bases of trade have not been changed by war as much as some persons at first supposed, and it is even possible that the United States is not to be the net gainer in ability to produce for the foreign market. The United States and Europe will bear much the same general industrial relation to each other that they did before the war, and each will have about the same ratio of labor to resources that it had before the war. The one great difference between the two regions will be that Europe will owe the United States some billions of dollars whereas we owed her billions when the war started.

On December 9, 1918, Secretary McAdoo in a letter to Congress said that of \$10,000 million authorized by Congress, as a war measure, for allied loans, \$7,608 million had been made available in cash and \$611 million represented credits established but not yet available in cash. Further advances for war purposes would run it up to a total of \$8,500 million and the secretary asked Congress to permit the extension of time for those previously authorized

loans for one year after the war to cover the remaining \$1,500 of the \$10,000 million.

Explaining the desirability of this action, Secretary McAdoo wrote to Chairman Kitchin of the Ways and Means Committee, as follows:

"The gross needs of the governments of the Allies from the United States for after-the-war purposes they have estimated at a much greater total than 1,500 million dollars, but I believe investigation will show a considerable reduction in such estimates. A part of their requirements may be provided by the treaty of peace through awards in their favor for reparation either in money or material; a part will be provided out of dollars equivalent of our military expenditures abroad and a part should prove possible for these countries to finance through sales of private credit. A balance, however, is likely to remain which it may be impossible to provide other than by the use of loans from the government of the United States and the above amounts of about \$1,500 million should be sufficient for this purpose. . . .

"From the standpoint of enlightened policy the United States should put itself in position to provide the credits necessary to sell its surplus products until the establishment of normal peace conditions."

This last sentence from the secretary's statement helps to show how unnatural, how forced and, therefore, how temporary are our present unprecedented exports.

Another factor in this trade balance situation with Europe that should be carefully noted is the reduction of our imports from Europe almost to the vanishing point. Owing to the strain of war, they have, for a time, paid us in promises, promises of government to government, rather than in goods as is the common necessity of trade. In fact they have used promises almost to their limit.

In considering the post-war trade conditions that will prevail after a brief period of reconstruction, we should carefully appraise the changes that have occurred in the producing capacity of the various countries as affected by the war. Upon the whole the effort to produce food and war supplies probably has resulted in an increase of total per capita producing capacity for 1910 over that of 1914 in the United States, the United Kingdom, Italy, and all

of the West European neutrals. Belgium and Northern France have been in part devastated but the development of war industries in the uninvaded parts of France plus the reconstruction of 1919 will probably leave her also capable of as much or more per capita production in 1920 than in 1914.

In Germany and Austria there must be great need of repairs but there is also the important industrial fact that there has been great development of machine shops and chemical plants in making munitions. Poland, Russia, Serbia, Roumania and Slovakia are regions largely agricultural and doubtless greatly reduced in farm equipment and work animals. Reconstruction there must apparently be slower than in West Europe.

In the war changes brought to West Europe three important things stand out:—

(a) *Europe Has Learned Mass Production of Machinery*

The European munitions industry has compelled the manufacturers of the leading countries of Europe to acquire an industrial method that had before been almost an American monopoly—namely, standardization, interchangeable parts and mass production in the manufacture of wood and metal-machinery, the very basis of a manufacturing industry. The American mower, reaper, automobile, watch, phonograph and other machines have invaded foreign markets because we exceeded Europe in the use of this wholesale method of manufacture. The pressure for munitions has compelled Europe to apply this revolution in her greatly expanded machine shops. Europe has in a measure caught up with America in manufacturing method. This means that the war has raised the ability of a peaceful Europe to compete with the United States, has put her in a better position than she was in comparison to the United States to equip the railroads, highways, mines, fields and factories of foreign lands. There has been no material change in the basis for the production of highly wrought products such as textiles, chemicals, and instruments of precision in which Europe has long led the United States because of the more abundant and more highly skilled labor supply resulting from greater density of population.

(b) Europe Has Increased Her Use of Agricultural Machinery

European agriculture has also been improved, especially British agriculture. The farm tractor and other farm machinery have worked a revolution here also, releasing man power for other things. One of the most spectacular changes of the war is the sudden spurt of Britain, that brought her from the position of the greatest food importer to the stage where she can largely supply her own breadstuffs. Many leaders of British opinion have announced the intention of maintaining this agriculture. The economics of agriculture, of trade and of sound national policy make this desirable for England, for she has a home market and excellent agricultural resources. In a statement to the British public on November 22, 1918, Messrs. Lloyd George and Bonar Law said, "The country will need all the food, all the raw materials, all the credit which it can obtain. Agriculture and key industries must be kept." This new British agriculture helps to offset the temporarily reduced agricultural capacity of Russia and East Central Europe, and for the next decade promises to reduce Europe's net demand for import grain.

(c) Man Power Shortage in Europe and America Much Alike and Largely Replaced by Machinery and Improvements in Efficiency

In man power, Europe has killed 10,000,000 men, but she kept home about 3,000,000 people who would normally have come to the United States. For thirteen years before the war we received on the average 784,000 immigrants net. During the war we received 102,000, a difference due to the war of 682,000 per year, or for the four years of the war over 2,750,000, or more than Germany or France or Britain lost in the war, although the war loss was of men, and our immigrants were partly women and children. The stopping of the European emigration during the war has been a substantial factor in mitigating her man-power loss. For the future the labor supply for America from immigration is uncertain. We have a more stringent immigration law than we have ever had before.

The conscript armies of the Central Empires, France, Italy and Russia with their millions at one, two and three years service, have kept constantly in military training a number of men nearly or quite equal to the total soldier death losses of the war. The

abolition of the conscript army would at once nearly or quite replace Europe's man power. The support of these millions of non-producers in the barracks has been another burden that may be lifted from European industry.

In one sense there has been no loss of man power, for the improvements in machinery, the improvements in industrial organization and manufacturing method, the greater work by women—all those have much more than replaced the men who have disappeared in both Europe and America, and Europe has probably surpassed the United States in all four of these respects—improvements in machinery, in manufacturing method, in industrial organization and in the training of women workers. Upon the whole Europe's net labor shortage due to the war may be surprisingly little more than that of the United States.

It therefore appears clear that, except for anarchy, Europe is upon the whole about as able as ever to compete with the United States after a brief period of reconstruction, for which the United States will supply important raw materials or credit.

After this reconstruction period we may expect the pre-war economic relationship between Europe and the United States to resume, save for the facts of debt to the United States and the increased European ability to compete in the manufacture of machinery. That pre-war economic relationship was one in which Europe loaned to the United States; now she owes us money, a strong reason for exporting to us. She loaned to us in the pre-war period because the United States was such a good field for investment. The United States is still a good field for investment.

AMERICA AS A FIELD FOR INVESTMENT AND ITS INFLUENCE ON THE TRADE BALANCE

In the post-war as in the pre-war period the United States with its great unused resources of land, mine and forest will continue to be an excellent place for the starting of enterprises and, therefore, for the investment of capital, so that the prediction of a great exportation of productive material for foreign investment may not come true and we may instead have a surplus of imports, due in part to the industrial development of our own resources rather than of foreign resources.

In this matter of capital and surplus we should constantly keep

in mind the distinction between *governments* and *peoples*. The British government and the British nation are a case in point. The government is heavily in debt, chiefly to its own people. Payment on this debt will transfer money from one British pocket to another. They have borrowed a few billion dollars from the United States but they have loaned to France and Italy and they have settlements coming from Germany. Meanwhile it is generally agreed that Britain's producing capacity, and therefore her capacity to export capital, is greater than ever. Britain, therefore, appears likely to resume promptly her old function of exporting capital and the resources of the United States, having waited for the last four years, may attract that capital as they did before the war. In considering these problems it should be remembered that we are in a situation with many new and uncertain elements, any one of which may change the whole situation. However, we must take action and that compels us to weigh all the factors we can in the great tangle of new and untried political, financial and industrial elements.

THE REDUCTION OF CAPITAL THROUGH FEAR OF WAR

The amount of surplus goods, that is to say, the amount of capital for investment in the world, and therefore the amount of real wealth in the world may be substantially reduced if the fear of war makes a widespread desire for industrial preparedness. If, as a possible war preparation, England, France, the United States and other countries start in to develop and maintain industries for which they are at an economic disadvantage, it will have a national result exactly like that produced by a conscript army. For example, shall the United States use rich manganese ores from Brazil, or poor ores from the home country? If we adopt the latter policy it will need two dollars of investment in America to one dollar in Brazil, two days of labor in America to one day of labor in Brazil. It will mean higher prices and therefore less riches in the United States through the failure to develop foreign investment and foreign trade.

GERMAN PAYMENTS AS A TRADE FACTOR

Germany may decide the export surplus of her enemies. If they compel her to pay for the war destruction or the war costs

or both, she may at the start borrow a little in neutral countries if she can establish the credit. But in the main, Germany can pay her enemies in only one way—goods, exported goods. If she had all the gold in the world, other nations would have no money, and it would in any case be only a drop in the bucket. What then? Goods. The facts of trade tend to make us forget that gold, like all other money, is but a medium for the exchange of goods. The only exception is when the gold happens to be the product of a mine in which case like coal it is goods, for the country first producing it. Countries settle trade differences with gold, but they can get the gold only by digging it out of the ground or by buying it with goods. As Germany is not a gold producer, she can get gold only by buying it with goods—with exports.

Her enemies wish to make her pay for the war. How may it be done? War claims against Germany may be treated in four different ways:

- (a) *She May Be Required to Pay Money Secured by Selling Her Exports in the World Market.*
- (b) *She May Be Required to Deliver Goods Directly to Her Enemies.*
- (c) *She May Be Boycotted.*
- (d) *German Labor May Be Utilized in Reconstruction Work.*

(a) *Money Payment*

This merely means exports, selling abroad. Goods will be used to purchase bills on London, Paris, Brussels, or New York, and these bills will be delivered to the representatives of the collecting country or countries. By this process, Germany may send the goods to neutrals and transfer the credit to England or France. Thus she may send cloth and machinery to Argentina in payment for wheat and meat that went to England or France. France paid Germany in 1871-73 chiefly with bills on London, but it was none the less a payment with exports, of which France showed at the time a distinct surplus over imports. Germany, receiving all these credits, showed a financial inflation and a speculation which, according to many authorities helped bring on the panic of 1873, and made its effects in Germany much more severe than in France.

Because of these war settlements Germany may be compelled to

show an export surplus of a billion or two per year for a term of years. If she does do this other countries will find it difficult to do the same thing at the same time, for Germany will by this process become a country of low prices, therefore, a country of low wages, a country without luxury. It will be most difficult for countries with higher prices and higher wages to compete with Germany in neutral markets in the sale of commodities where the competition is even: as in chemicals, textiles, machinery and other metal manufactures. The United States and the Allies will have high prices due to the inflation of war loans. Germany will probably have to repudiate all of her internal debt, and therefore her currency will not be inflated. This contrast will make all countries having an inflated currency extra good markets for German goods. By sales in those markets Germany will get credits to send to London and Paris to pay the war debts of those countries. Germany will in a sense be giving the goods away and the rest of the world will be trying to sell them in competition with her. The result of such a competition is plain. It will make a lower price level throughout the world, because it will increase supplies and large supplies always tend to reduce prices also. After ten or twenty years of paying for restoration Germany will have the greatest export trade ever seen except our recent war trade. She will have had to build up a trade first to get the credits to pass to her enemies. Her enemies will have the credits but Germany will have the trade.

Some people are much alarmed at this prospect. A part of this fear arises from the widespread belief that exports are necessarily a fine thing for a country and imports necessarily a bad thing. This eighteenth century idea called mercantilism was held so strongly by Napoleon Bonaparte that he freely permitted England to import grain from the Baltic in 1810 and 1811, thinking that he was thereby injuring her. There are elements of possible injury to the countries receiving heavy German payments but there are probably ways by which most of the injury can be avoided.

If we look at it in its simple economic light, this payment looks good, very good. For a term of years Germany becomes the servant of other nations to the extent of billions of dollars worth of goods which she produces and sells for their account, turning the

money over to them,—wealth, national wealth. That certainly looks good. It would undoubtedly help in the payment of national debts. England and France would hand money over to their citizens in exchange for bonds. The Belgian government could pay for the bread the Belgian Relief Commission distributed through the terrible years of war.

Here is a place where we must deal with the distinction between the government and the citizens of the country. There are two kinds of danger in this situation—one industrial and the other financial. The industrial danger lies in the possibility of the citizens living on this restoration fund for a time and getting out of the habit of supporting themselves so that when the payments end they would be in the position of the rich young man who lived on his father's money while it lasted and had not learned how to support himself when it was suddenly gone.

If the people of the fund-receiving country could keep up their work and their industries just the same this difficulty would not arise. This, however, is very difficult or impossible to guarantee. It depends on the individual choices of too many people. Some prefer to work and to save; others prefer to work some and to spend. Then from time to time industrial depression, the greatest ogre of modern industrialism, throws millions out of work whether they will or no. Here is a point where the financial danger of the restoration payment aggravates the industrial danger. It may tend to increase panics in the receiving countries as did the French payments to Germany 1871-73.

There is little doubt that the receipt of hundreds of millions a year of foreign credits by England, France, Belgium and Italy will be a menace by making speculation, inflation and panic that will require a careful and vigorous control of governmental finances that are already overinflated with war loans—paper money in fact. Undoubtedly one part of this financial control should be a continued, careful inspection and licensing of capital issues in all the countries receiving German money and probably in the United States also.

The ultimate industrial danger from the German restoration fund is that Germany will finish her payments with a huge industry and thoroughly established trade outlet for that industry, while her enemies have neither the industry or the outlet. This danger

if it is a danger, can be partly avoided by having the payments on the fund taper off, declining after a time at a small percentage each month until they gradually disappear. Under no condition should the rapidity of payment be left to Germany. In 1871-73, France placed Germany at a disadvantage by handing her money faster than she could digest it. If Germany were now left free to pay as she chooses she may seriously injure world finance.

The gradual ending of the payments would let international trade and industry make a gradual adjustment to the great change, so that its ending would be unnoticed, but the political effects of such a long drawn process might be world destroying.

A gradual ending would also dovetail with a process of foreign investment. The restoration fund should be and probably will be largely invested in foreign countries. German cloth, cement, machinery, glass, paper and general consumption goods may now go to Spain for French and Belgian account, and let French and Belgian financiers resume the work on hydro-electric, irrigation, power and public service enterprises that stopped so suddenly in 1914 when French and Belgian supplies were cut off by war paralysis. The building of a railroad in Brazil means that somebody furnishes equipment for the road and the goods used by the men, their families and the mules which do the work of building the road. Thus Germany might build a railroad in Brazil for English account by sending cars, rails, steam shovels, dynamite, cement, and locomotives to Brazil. She could also send clothing, shoes, pocket knives, playing cards and phonographs for the men and also gasoline, tobacco, flour, and bacon, mules and bales of hay which she might secure in the United States, Argentina and Brazil, sending potash to those countries in payment. The financial items in the transaction would be wages paid and certain pieces of paper, bills of exchange, written in terms of gold. Thus the surplus exports which produce Germany's restoration fund may be used to equip enterprises in Russia, Asia Minor, Brazil and even in the United States for the account of English, French and Belgian investors who will fatten their imports with the return from these investments. The income from these investments should gradually mount as the annual payment of restoration money declines, so that its ending would be nearly unnoticed. The period of payment must end, however, with Germany pos-

sessed of large producing capacity and large exports while England and France will in all probability have relatively small exports and large imports—this surplus of imports meaning, of course, that the nations were rich with foreign investments on which they were receiving returns.

The Allies, fearing the development of German foreign trade even when they get a good part of the proceeds, may try to get settlement from Germany without permitting her to build up *foreign trade connections*. With this end in view, they might have her send goods to themselves.

(b) *Delivery of Produce by Germany Directly to Allied Governments*

This would in part keep Germany from developing trade connections and good will, which are very important, but she would *be compelled to have* the producing capacity and there is little reason to think that she could be compelled to pay as much in kind as she could in cash. A government could easily take potash, sugar, potato flour, rails, plain cloth, standard machines and standard bulk chemicals, but it is difficult to conceive of a government taking toys, women's wearing apparel, ribbons, pocket knives, cameras, drugs and perfumery—types of the best income-yielding export trade. Therefore, payment in kind only amounts to a renunciation of a large part of the possible payment.

(c) *Boycotting Germany*

Some people are taking the position that they will punish Germany by not using German goods. This is the exact opposite of receiving restoration money. It is an extreme form of the renunciation of German restoration money. It means, in short, that we have chosen to do things for ourselves rather than have Germany do them for us. It is more nearly an expression of feeling than of thought.

(d) *Reconstruction by German Labor*

Perhaps the safest thing that could be done would be the keeping of the German prisoners for the actual physical work of the restoration of France and Belgium. They could be relieved by other Germans. They could receive visits from their families, or even have members of their families with them. They could be fed and clothed from home, but this given number of Germans

would stay in the war area and work until restoration was complete. This would leave the man power of France and Belgium free to restore their shattered trade. It would be the policy with the least possible trade danger. Unfortunately it can account for only a small part of the war cost, most of which, is for a past transaction and if paid must be in some kind of international payment.

Whatever the form of German payment, if she pays, it will be through exports, and export surplus, to which the world trade must adjust itself in accord with economic law rather than political edict. Trade can violate economic law only by paying an economic penalty.

AUTOMATIC FACTORS IN TRADE SETTLEMENT

Certain economic conditions tend automatically to produce certain results, regardless of the laws of nations.

The way in which trade situations tend to check and correct themselves is well shown by the derangement of exchange that prevailed during the war when the United States would not export gold and could not export goods. The *Annalist*, New York, November 4, 1918, said:

"We have always had a balance in our favor in foreign trade, and we are ambitious to increase our exports. How are foreign countries going to settle balances in our favor? We have seen since we got into the war a very serious derangement of the exchanges, because gold was no longer available for settling balances. At this very time a man in Canada who has a payment to make in the United States must pay about \$2 per \$100 for exchanges. Only a few months ago a resident of this country who had a bill to pay in Spain was obliged to pay about \$150 to get a draft for \$100. Of course such conditions are ruinous to business relations. No trade could stand that in normal times. How, then, can we hope to increase our exports or even collect the interest payments due us, not to speak of payments on the principal?"

THE CHANGE OF UNITED STATES FROM EXPORTER TO TRADER

Many students of trade and finance are agreed that economic forces, of which the Spanish case above mentioned is a type, will compel the United States in a few years to do as the investor na-

tion does—import more than she exports, as England, investor nation, has done for many years. This will probably begin after the first urgent calls of famine and reconstruction in Europe have been met by American exports, which until that time will continue larger than imports and increase our investments and our prospect of future returns.

The arrival of this condition of import surplus will doubtless produce many readjustments in America, for some of us have naturally come to feel that many of the temporary industrial changes produced by the war were permanent. We have, because of loans, largely government loans, been an exporter to a pleading world, the most extensive exporter ever seen. The history of trade during the war is the history of peoples begging the United States for goods and also the history of the scientific organized efforts of the American government to reduce trade with the neutral world that we might concentrate our industrial power on the war. The list of great increases in our exports between 1914 and 1917 shows how astonishingly the war affected our trade, either by taking our produce or by giving us the chance to supply temporarily the markets normally supplied by Europe.

	1914 Export value million dollars	1917 Export value million dollars
Brass and manufactures of.....	4	86
Explosives.....	6	802
Firearms.....	3	95
Zinc.....	.4	65
Copper and products.....	146	322
Machinery.....	115	261
Automobiles.....	32	118
Horses and mules.....	4	86
Petroleum and products.....	157	246
Breadstuffs.....	165	588
Meat and dairy products.....	146	403
Sugar and molasses.....	4	81
Leather and tanned skins.....	36	108
Leather manufactures.....	20	43
Cotton manufactures.....	51	136
	889.4	3,440

The export increase in these fifteen classes alone in three years amounts to 2,550 millions—a sum greater than the entire export of 1914.

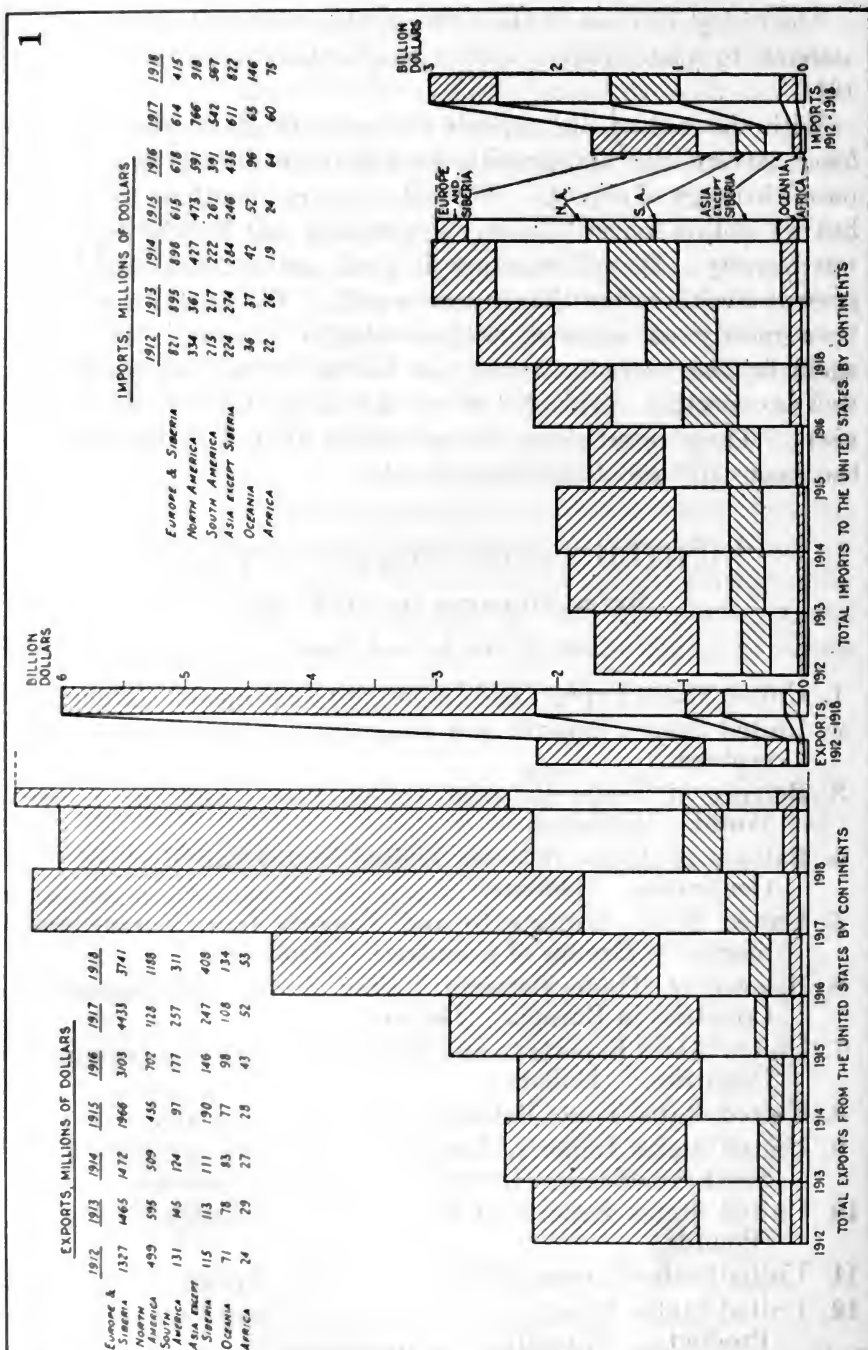
With the end of our exports for reconstruction, *financed by loans*, government and private, we will reach the end of our unparalleled orgy of exports. We will, of course, continue to export but we will no longer take pay in promises and feel the pinch of war poverty. We will take pay in goods and services, and have present wealth rather than future wealth. We have for a time been merely an exporter with incidental imports. We must again become a trader, buying as well as selling, importing as well as exporting. This will be a great change from the past four years. The greatest single reconstruction that America faces is the reconstruction of her foreign trade.

UNITED STATES FOREIGN TRADE

BRIEF SUMMARY for 1912-1918

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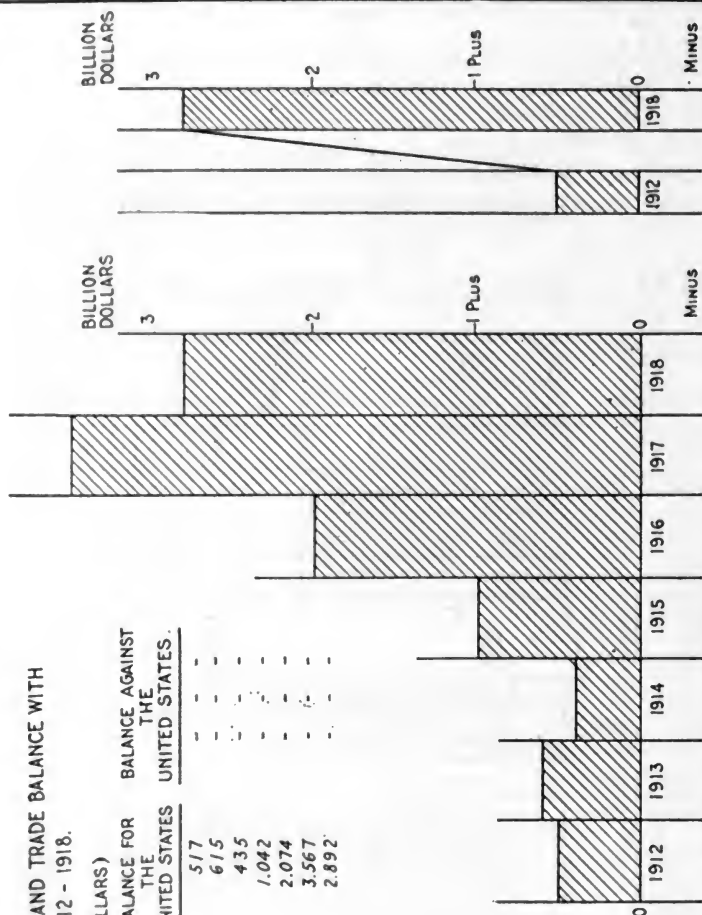


Shows that the greatest war change in our foreign trade has been the increase in exports to Europe and the decline in imports from Europe. Imports from Asia and South America have also increased greatly.

3

UNITED STATES EXPORTS, IMPORTS AND TRADE BALANCE WITH
ALL COUNTRIES 1912 - 1918.

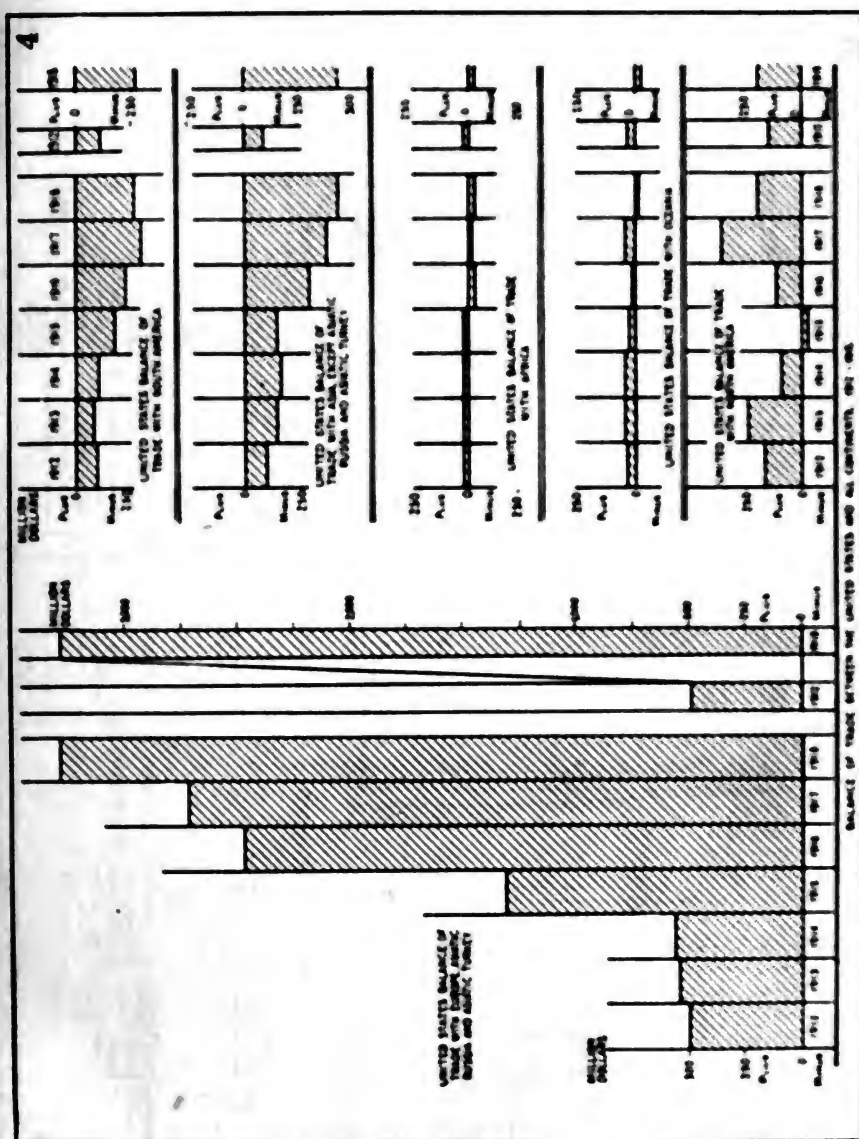
	UNITED STATES TOTAL EXPORTS	(MILLION DOLLARS)		BALANCE AGAINST THE UNITED STATES.
		UNITED STATES TOTAL IMPORTS	BALANCE FOR THE UNITED STATES	
1912	2,170	1,653	517	-
1913	2,428	1,813	615	-
1914	2,329	1,893	435	-
1915	2,716	1,674	1,042	-
1916	4,272	2,197	2,074	-
1917	6,227	2,659	3,567	-
1918	5,838	2,946	2,892	-

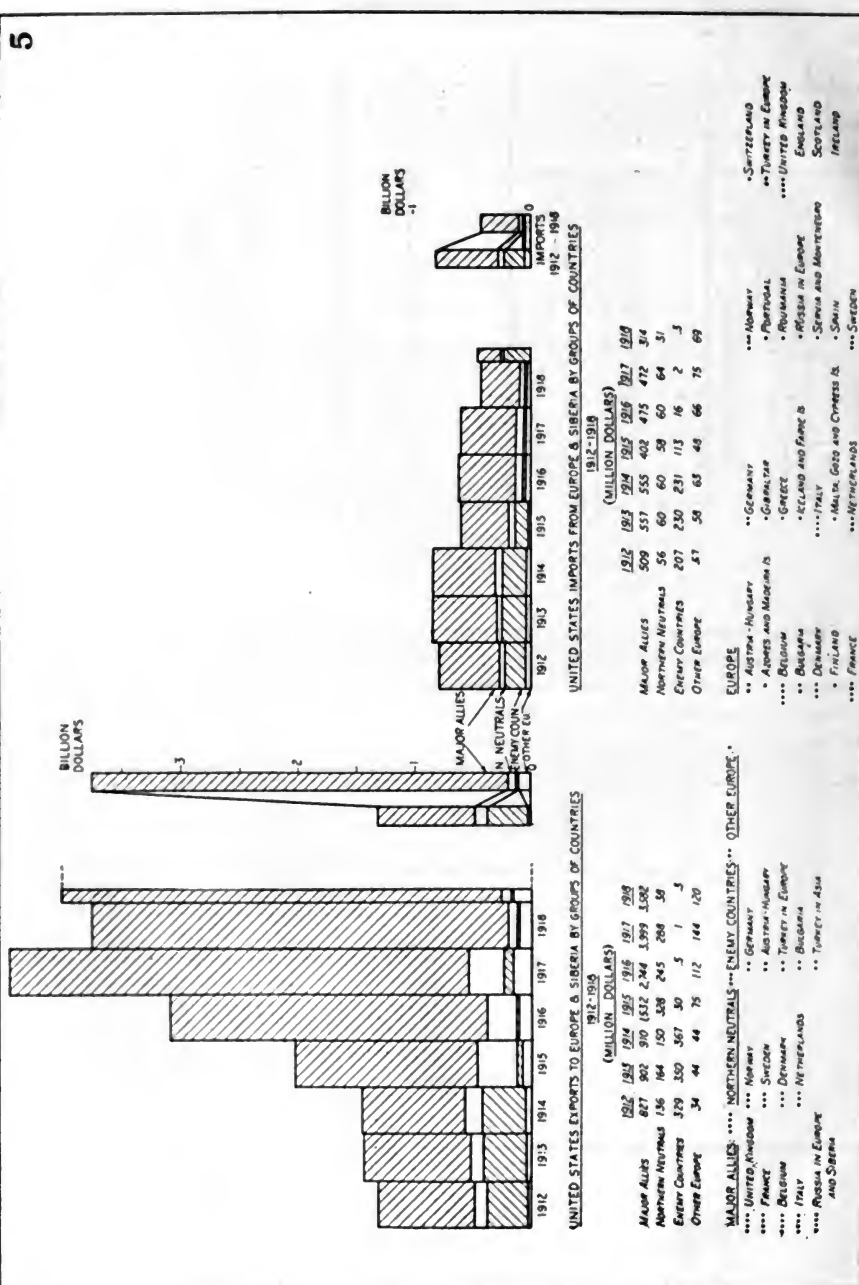


BALANCE OF TRADE BETWEEN THE UNITED STATES AND THE ENTIRE WORLD - 1912 - 1918

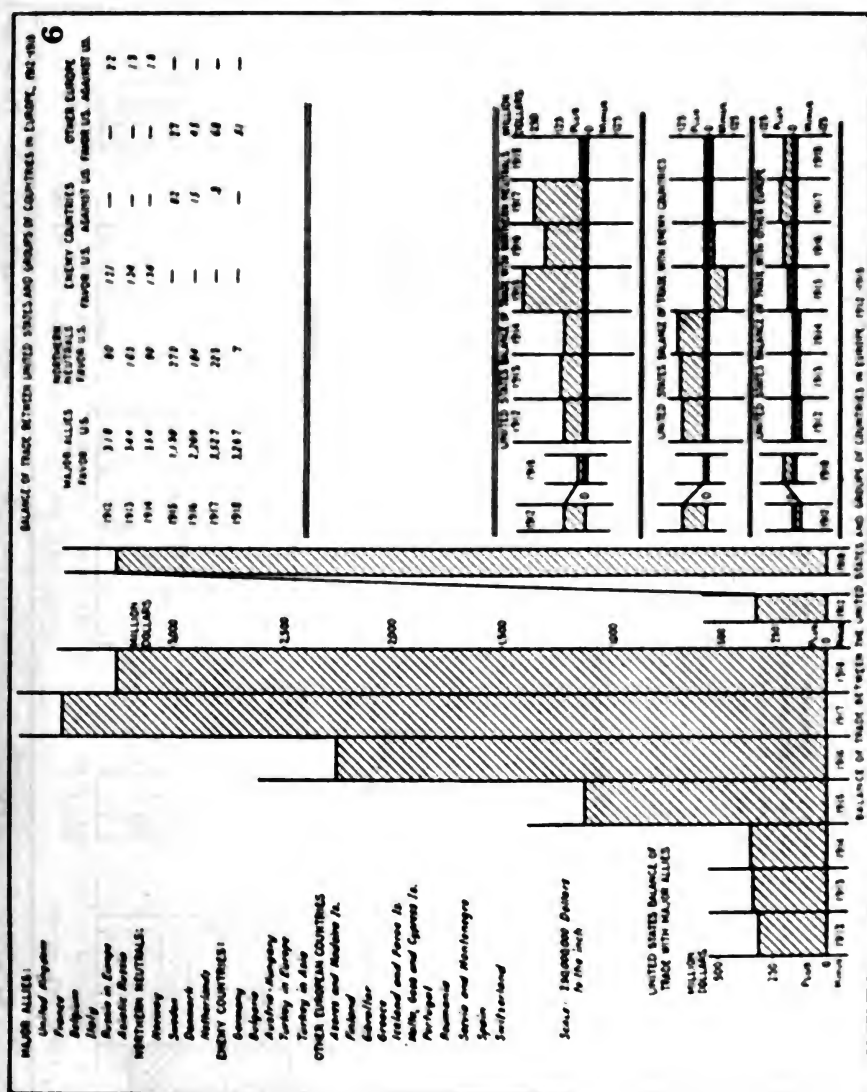
Scale: 500,000,000
Dollars to the inch.

This jump from five hundred million dollars to three billion dollars is because of the enormous borrowings of Europe.





This graph exhibits the importance of the Allies and the service of the northern neutrals to the central empires, as shown by the amazing substitution of exports to northern neutrals for exports to central empires in 1915, 1916 and 1917. The influence of our War Trade Board closed this door in 1918.

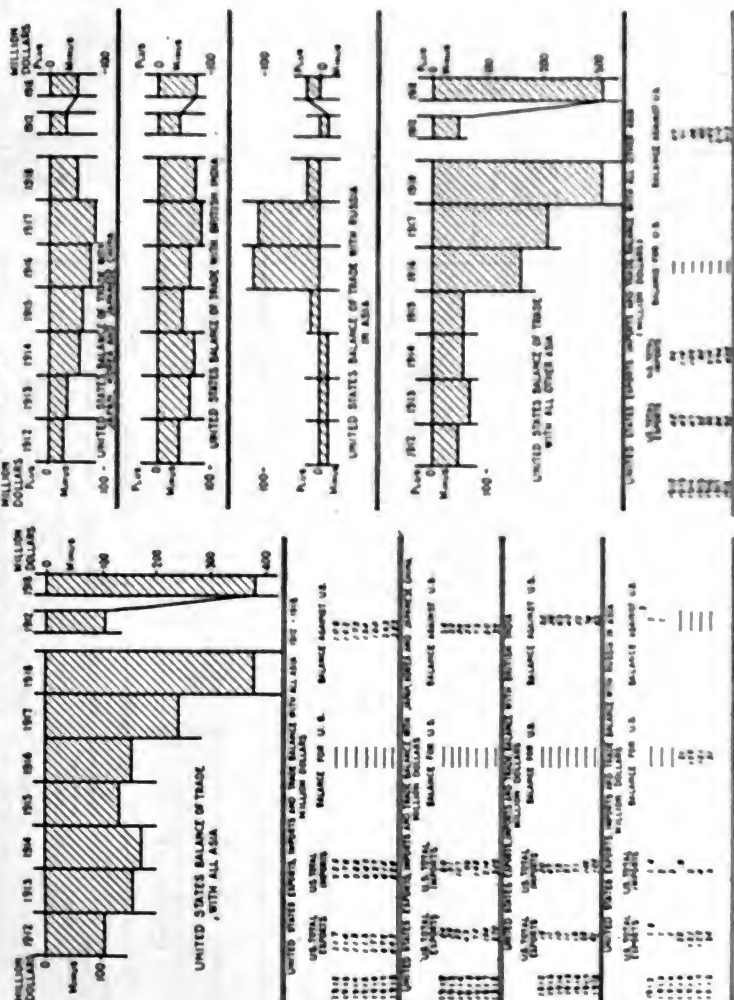


Nearly a tenfold increase in surplus to the Allies. The European trade was chiefly war trade—to Allies or to central empires and northern neutrals.

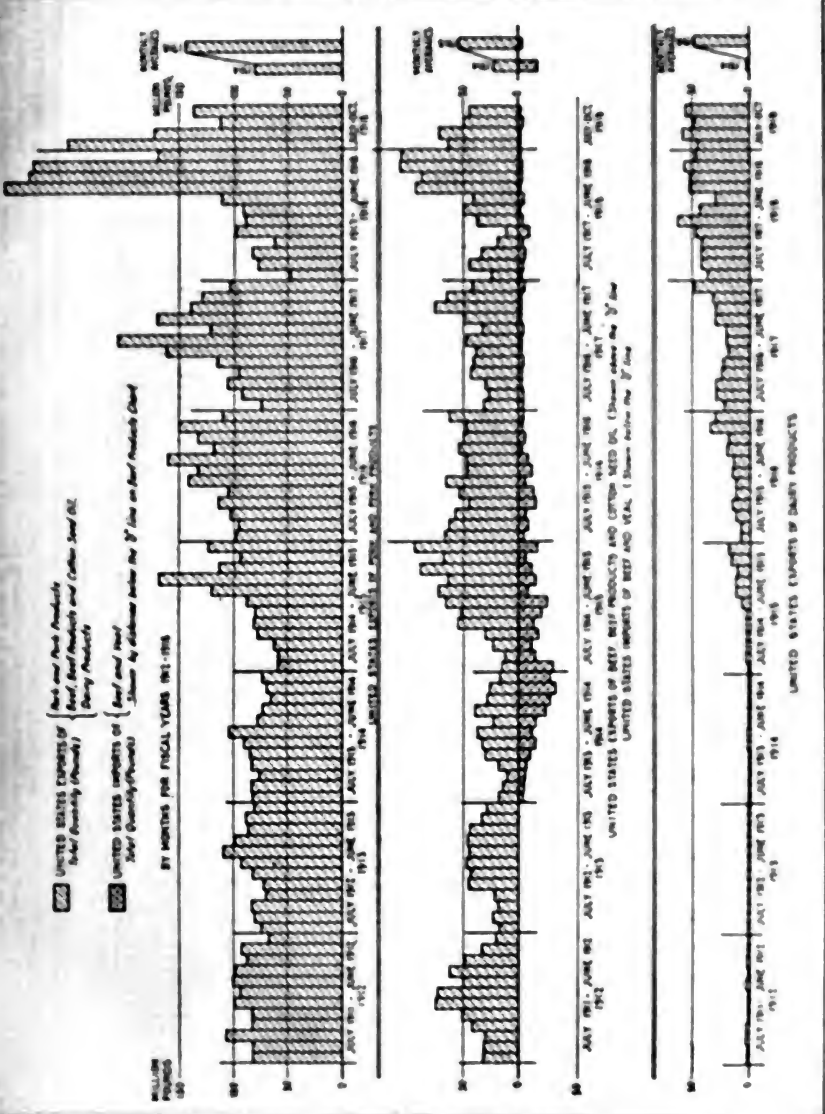


The rise in imports from Asia. The great war trade with Japan. The rise and fall of exports to Siberia which consisted of supplies for Russia. The constant absence of compensating imports from Siberia.

UNITED STATES FOREIGN TRADE BALANCE WITH ASIA 1912-1918

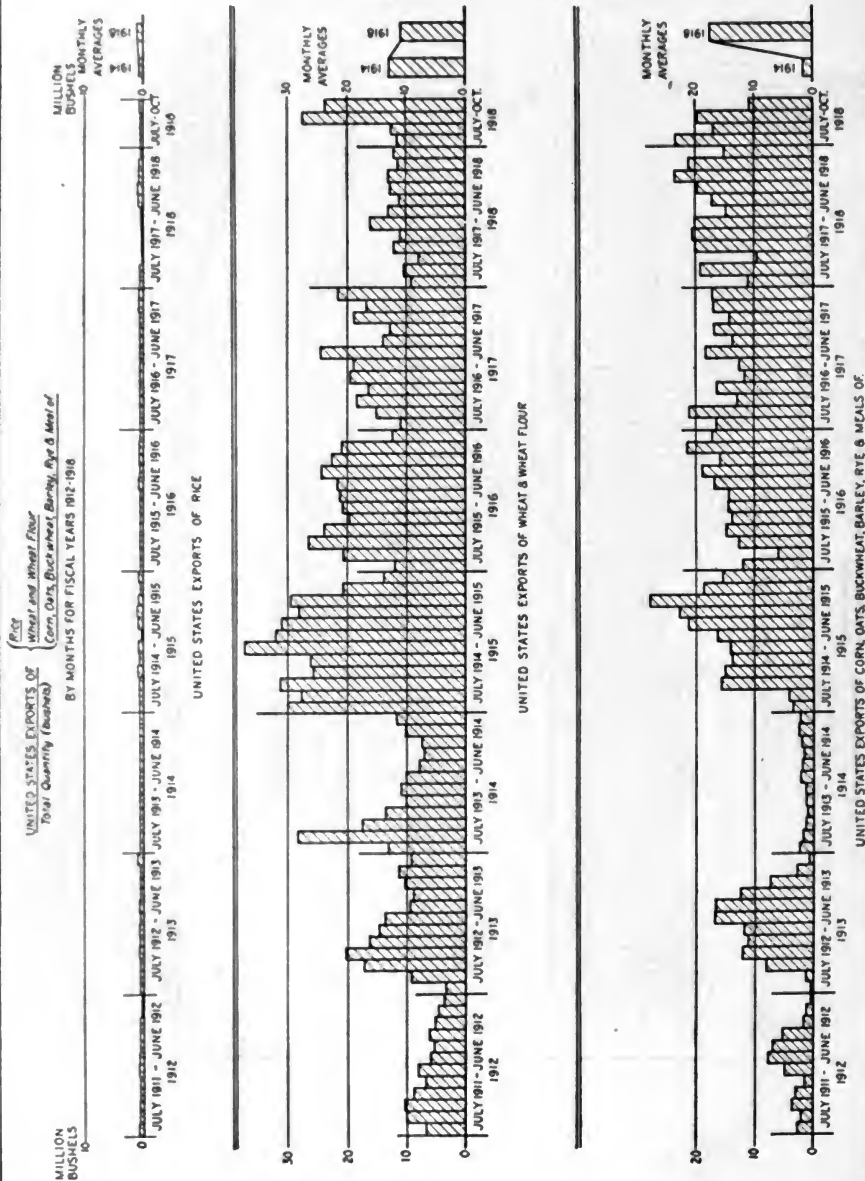


By passing goods to the United States, Asia has helped supply us with our huge surplus to warring countries. Russia in Asia should be considered for trade purposes as a part of Europe as it was a back door to Russia after the blockade of the Baltic and Black Seas.



This shows, save for dairy products, rates of increase which will surprise us by their smallness. The food exports were concentrated on the Allies to an unprecedented extent. The substantial increase of pork exports in the spring of 1918 is a direct result of the national food production campaign of 1917. The war opened with American beef imports at a larger figure than exports. The imports nearly stopped and exports, which had been declining steadily, have slightly exceeded the 1912 amounts. In dairy products we have made an enormous relative increase but the total amount of 50 million pounds a month is but little more than twice the Danish export of 1916. American condensed milk has probably saved millions of lives in Belgium and Northern France. The high prices, the disbanding of armies and the increase in the use of vegetable fats may be expected to cut this sharply and the restoration of European herds will in a few years nearly or quite restore the pre-war condition which was one of steady decline in meat exports with a small or negligible export of dairy products.

11



With a constant demand for wheat the great fluctuations of crop due to climate give a variable surplus. The two successive record-breaking crops of 1914 and 1915 and the mediocre ones in 1916, 1917 and 1918 gave the United States a steadily declining export of wheat throughout the war. Despite a famine demand, after the war we may be expected to resume our decline as a wheat exporter especially in view of England's restored agriculture. The wheat substitute grains and the fodder grains viz., corn, oats, buckwheat, barley and rye were exported in much greater quantities. This too may be expected to decline after the harvest of 1919.

12

UNITED STATES EXPORTS OF BEEF AND PORK AND BEEF AND PORK PRODUCTS (QUANTITY) 1912 - 1918.

VALUE OF ALL MEAT PRODUCTS 1912 - 1918.

ALSO
UNITED STATES IMPORTS OF BEEF AND VEAL (QUANTITY) 1912 - 1918.

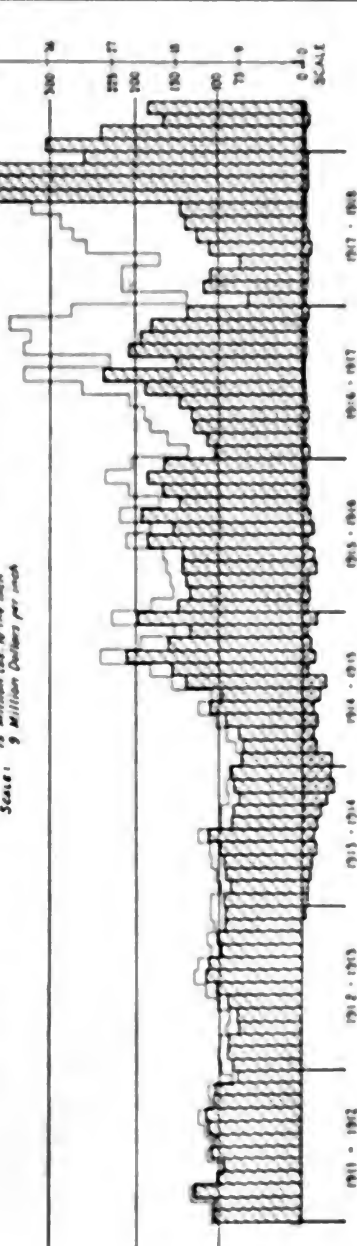
	EXPORTS												IMPORTS												
	Semi-Annual Totals						Monthly Averages						Semi-Annual Totals						Monthly Averages						
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	
July	104	12	11	11	11	11	1	38	12	32	68	6	3	148	21	3	103	16	3	64	16	3	64	16	
August	104	12	92	11	11	11	5	94	12	14	68	6	3	148	21	3	118	19	5	118	25	5	118	25	
September	129	15	90	11	11	11	2	86	11	12	78	10	4	140	18	1	131	21	4	131	25	4	131	25	
October	100	11	78	10	11	11	5	92	12	17	94	12	14	142	19	2	133	22	7	133	20	7	133	20	
November	94	10	79	10	10	10	5	94	12	13	111	14	13	142	19	1	148	24	6	148	30	6	148	30	
December	109	13	85	11	15	59	12	15	59	12	13	97	12	4	186	25	1	186	31	1	179	32	1	179	32
January	105	12	100	13	12	113	14	23	140	18	11	1	1	165	21	1	237	39	1	141	34	1	141	34	
February	112	14	112	14	11	113	14	23	140	18	11	1	1	165	21	1	237	39	1	141	34	1	141	34	
March	118	14	112	14	11	113	14	23	140	18	11	1	1	165	21	1	237	39	1	141	34	1	141	34	
April	104	12	97	12	34	76	10	6	140	32	4	1	1	167	24	3	193	38	1	167	34	1	167	34	
May	101	13	101	13	84	82	10	6	140	32	4	1	1	167	24	3	193	38	1	167	34	1	167	34	
June	28	9	25	12	30	83	10	5	136	26	1	1	1	161	24	4	139	35	1	281	70	1	281	70	
	1911 - 1912													1912 - 1913						1913 - 1914					

Export Dollars

Export Pounds

Import Pounds

Scale: 75 Million lbs. to the inch
5 Million Dollars per inch



This graph, showing beef and pork exports combined, and the total value of meat exports, presents the quantity in the shaded area and the value in the red line — a good illustration of the way actual increases of goods and price inflation have combined to make a great value.

American Industries and Foreign Trade Following the War

By WALTER B. PALMER

Formerly Special Agent in the Bureau of Foreign and Domestic Commerce and in the Tariff Commission

NO one knows how far reaching will be the political and industrial consequences of the greatest war in all history, but one feels that the industrial conditions of the next few years can be forecasted with more assurance than can changes in the political field. Moreover, it seems easier to make predictions about what will be the industrial situation in the United States than in any other country that was actively engaged in the war. Without undue optimism one may hope that in America, after a short readjustment period, there will be permanent industrial prosperity.

REASSURING FEATURES

Reassuring features of the financial, industrial and commercial outlook in this country are:

1. During the war people acquired habits of more intensive labor and learned lessons of thrift and economy; many who had been extravagant, wasteful spenders freed themselves from debt and accumulated savings; and, where there were probably not over a few hundred thousand bondholders in the country, there are now, it is estimated, twenty-one million owners of Liberty Bonds.

2. The enormous trade balances in favor of this country, the purchase from foreigners of practically all American securities held abroad before the war, and the loan of something like eight billion dollars by our government to the Allies, have converted the United States from a debtor country to a great creditor nation; while immense bank deposits and an unprecedented accumulation of gold here place the United States in the strongest financial position.

3. The tremendous resources of the United States, unimpaired by the war, and the fact that the raw materials needed by the

more important industries are produced here, place this country in the most favorable economic position.

4. Manufacturers and financiers, many of whom were formerly largely indifferent to foreign trade, are determined to hold a large share of the vast trade with other countries which they have recently acquired and which became during the war much larger than the foreign trade that any country had ever enjoyed at any time.

When hostilities ended with the armistice last November, American industries had experienced unexampled prosperity, some for three years and some for four years. The only exceptions were what the government considered "non-essential industries," which had been restricted as to supplies, but these industries, producing luxuries or semi-luxuries, doubtless will participate in the general prosperity that may be expected when economic dislocations caused by the war have been adjusted.

American industries were stimulated by the demands of war to colossal production. The war ended unexpectedly, the demand for war munitions ceased suddenly and many government contracts were cancelled. Some time is necessary for a readjustment from a war to a peace basis. During this interval business will be relaxed. Prices that reached heights far beyond any ever before known will naturally fall, and during a falling market merchants and their customers will be cautious about buying. How long will be the time of transition no one knows, but it would be better for the country that changes be not too abrupt. On account, however, of unprecedented conditions, it may be expected that the time of industrial readjustment will be comparatively short.

History shows that after victorious wars nations have eras of prosperity. Instance the expansion of British industry and foreign trade after the Napoleonic wars. For eight years after our Civil War there was great industrial activity in the United States. Our national wealth amounted to \$514 per capita in 1860 and \$780 in 1870.

The waste places of the earth, devastated by war, must be restored, and the materials for reconstruction, whether raw materials or finished products, must to a large extent be furnished by the United States. Since 1914 the United States has supplied goods to countries all over the globe, and never before were stocks

of merchandise so low as they were when hostilities ceased. Even in the United States economies practised during the war have had the effect of reducing purchases, especially of goods of the more expensive grades. Building operations, except of factories for war munitions, have largely been suspended for two or three years. During the war there was practically no railroad construction in any country, while railroad equipment deteriorated.

Almost from the beginning of the war between the Allies and the Central Powers, and especially during the nineteen months between the declaration of war by the United States and the armistice, American factories were operated at peak-load capacity. Overtime work has stopped and many factories have slowed down, while some have closed down pending a readjustment of labor and market conditions. But the demands of both domestic and foreign trade will soon be so great that there will necessarily be great industrial activity, not so much as during the war, but probably more than during any other period in our history.

The economic position of the United States is dominant. Before the war began in Europe, our manufacturers in some lines had established a large, prosperous and rapidly developing export business. This commerce has grown by leaps and bounds during the war period. With ample capital and abundant raw materials, and with factory organizations adapted for large unit production, there is little reason for doubt that our industries can command hereafter a foreign trade much larger than it was previous to 1914. The dislocation of industry has been less in the United States than in any other belligerent nation, except perhaps Great Britain and Italy, and it is not clear that those countries should be excepted. The Germans, during their occupancy of the industrial sections of France and Belgium, demolished factories and destroyed machinery they did not remove. Neither Italy nor Austria-Hungary has been a competitor of the United States in foreign commerce, except in small lines. Germany has been a strong competitor, but, deprived of valuable coal and iron mines, stripped of colonies, entirely dependent on other countries for raw materials, oppressed with enormous war debts and indemnities, her selling organization and credit system destroyed, Germany's former industrial prosperity and former position in international trade cannot, for many years at least, be regained.

WAGES AND PRICES

The most uncertain problem in the future of industry, in America as well as Europe, is that of labor, and this involves prices. Wages and prices, which are always closely related, rose during the war to figures never before reached or even approached. Undoubtedly these high levels will now be reduced, but therein lies the danger. Labor will resist wage reductions, and the highest officials of union labor have announced that wage reductions will be resisted with all the power of their organizations. Should such reductions be forced by manufacturers, disastrous and widespread strikes might be expected. It is probable, however, that manufacturers generally will be wise enough not to attempt to drive wages downward before there is a fall in the cost of living. This country could ill afford a labor war following an enormously expensive foreign war. Manufacturers should remember that wages are not really the amounts shown on the payrolls, but the purchasing power of these amounts, and should recognize that during an era of high prices labor is entitled to remuneration on a corresponding scale.

It would be better for the country that wage and price readjustments come about gradually. Prices of some commodities, wool and cotton and their textiles, copper and other metals, have already declined from war-time levels. Undoubtedly there will be price reductions in other lines during 1919, the extent of which cannot be estimated but which will be appreciable. As famine conditions prevail in a large part of Europe, food products will doubtless decline in price more slowly than other commodities, but, with average crops in the great food producing countries, the shortage will be relieved throughout the world. Of course average crops, that is, equal to the pre-war average, cannot be expected in Russia, where there is political upheaval, or in the devastated sections of Europe. Uncertainty as to the world's wheat production in 1919 makes uncertain the market price during coming months, although our government has guaranteed \$2.26 a bushel to farmers.

In all countries there was during the war a shortage of labor as well as of food. After the period of transition from a war to a peace basis there probably will be employment for everyone. The demands on industry will be so great that an adjustment to

peace conditions will probably be in full effect by the time demobilization is completed, possibly before, and then there should be employment for all returned soldiers. In the United States the supply of labor will be more or less affected by immigration, but the extent of immigration after the war is a matter of pure guesswork. Unquestionably millions of people in Europe wish to come to America. If only 1 per cent of the populations of nations lately at war should seek asylum here, the number would be between four and five millions. But the recently enacted literacy test excludes many from the United States, many especially from Central and Southern Europe where illiteracy rises to 50, 60 or 70 per cent. Some European countries will probably prohibit emigration, either by direct laws or by making it difficult to secure passports. Then, owing partly to a shortage of ships, emigrant rates will be high and this condition will likely continue for a considerable time. Wages will undoubtedly be higher in all European countries after the war than before it began, and this will have a tendency to hold many to their native soil. Moreover, many aliens now in the United States have always intended to return to Europe. During the four years of war they earned high wages and saved more money than they ever before possessed. Many now will return to their old homes, with the intention of buying farms, for they believe that in many places, especially in Russia, Austria-Hungary and the Balkan States, land can be purchased cheaply as compared with values before the war. The fact that prohibition will permanently prevail in the United States from July 1, 1919, will likely deter some foreigners from coming to our shores, and hasten the return of some aliens to Europe.

During the war the Department of Labor has established nation-wide employment agencies, by which the labor forces can be distributed to the industries and sections where they are most needed. If, perchance, there should be a surplus of labor, it may be employed in building roads, diking rivers or on other public works, or it may be employed in the reclamation of public lands, for which some states have already provided and for which Secretary Lane asks a congressional appropriation. The labor needs of agriculture are urgent, and it would be better for the country if hundreds of thousands, or even millions, of men could be induced to go to work on farms.

OUR TARIFF POLICY

Another uncertain factor affecting industrial reconstruction and export trade is the tariff, and this applies to competing countries as well as to the United States. No one knows what changes will be made in the conventional tariffs that Germany and Austria-Hungary have had, or in the maximum and minimum tariff of France or in the free trade system of Great Britain. The Peace Conference may decide some questions as to the tariff relations between the Allies and the Teutonic Powers, and possibly may impose on the latter economic barriers for a number of years. With a Democratic President and a Republican Congress there likely will be no tariff changes in the United States during the next two years, except perhaps higher duties on particular articles. Meanwhile dumping will be prevented by the anti-dumping provision of the Underwood-Simmons Act.

During the last twenty years legislation has been toward lower tariff rates, as shown by Table I. The average duty computed on the value of imports for consumption was approximately only 6 per cent less on both dutiable imports and total imports during the (nearly) nine months' period from October 4, 1913, when the Underwood-Simmons Act was passed, to the end of the fiscal year, June 30, 1914, a month before the war began in Europe, as compared with imports during the fiscal year ended June 30, 1913, the last full fiscal year under the Payne-Aldrich Act.

It may be taken for granted that the Democratic party, as well as the Republican party, will favor duties sufficiently high to maintain in a prosperous condition the efficient plants in important industries. The maintenance of "key" or "pivotal" industries is favored by both parties as a national policy, as a measure of national independence and security. This is illustrated by the higher duties on aniline dyes, which a Democratic Congress, in 1916, voted to develop and protect as an infant industry. It is illustrated also by a bill to make the new rates more effective, a bill drafted by the Tariff Commission, which commission, established by Congress in 1916, was organized in 1917.

Conditions the world over are now abnormal but the advantage is with America. Taxes in the United States will be high to pay our war debt, but computed on either an ad-valorem basis or a

TABLE I

AVERAGE RATE OF DUTY, COMPUTED ON AN AD-VALOREM BASIS,
COLLECTED ON IMPORTS FOR CONSUMPTION DURING SPECIFIED PERIODS
UNDER TARIFF ACTS OF 1897, 1909 AND 1913*

Fiscal years ended June 30, 1899, 1909, 1911 and 1913	Average rates on	
	Dutiable imports	Total imports
1899, first full fiscal year under Dingley Act.	52.07	29.48
1909, last full fiscal year under Dingley Act.	43.15	22.99
1911, first full fiscal year under Payne-Aldrich Act.	41.22	20.20
1913, last full fiscal year under Payne-Aldrich Act.	40.05	17.69
Oct. 4, 1913, to June 30, 1914, Underwood-Simmons Act	33.99	12.30

*"Foreign Commerce and the Tariff, 1899-1915," p. 34. Published as Senate Document No. 366, 1st Session, 64th Congress. Contains many detailed tables relating to the tariff compiled by the writer from reports of the Bureau of the Census and the Bureau of Foreign and Domestic Commerce.

per capita basis, they will be higher in other countries than here. The cost of living here will continue high for an indefinite time but necessities will be equally as high or higher elsewhere. Wages will be high here even after reductions that may be expected. They will not be so high elsewhere, but the proportion of increase in wages above pre-war standards will doubtless be as great in other countries as in our own. Raw materials of most kinds will cost no more, if as much, in the United States than in European countries.

EXPORT TRADE AND PRODUCTION COSTS

Our export trade would, of course, be handicapped by excessively high wages as compared with those in other countries. But before the war our foreign commerce was built up largely in lines of manufacturing in which American manufacturers have shown their superiority over foreign manufacturers, in matters of factory organization, greatest possible use of machinery, subdivision of labor, standardization of products and large output. Such efficiency has to a great extent, frequently altogether, overcome the handicap of higher wages paid by American manufacturers, as compared with wages paid in Europe. It has,

moreover, been demonstrated that well-paid labor is more economical than that which is poorly paid.

Where the product is principally or very largely hand-made, America cannot compete with Europe, because of the higher labor cost here, but there are now few important industries of that kind and every year inventions are introduced that with less labor increase the output. The proportion of labor cost as compared with the total cost of manufactured articles is often much overrated. The Census of Manufactures in 1909 showed that the total value of manufactures was \$20,493,406,235, of which only \$3,427,037,884 was paid to wage-earners; that is, the labor cost was only 16.72 per cent. Of 260 industries (all that are specified by the census, with a group of "all other industries") there were 195 in which the labor cost was less than 25 per cent.* Other elements of cost shown by the census were raw materials, contract work, salaries, rent and taxes. It may be assumed that in all or most of the industries the cost to American manufacturers for raw materials did not exceed the cost to foreign manufacturers.

One thing that American manufacturers need is a cost-finding system. Their balance sheets show whether last year's business has been profitable, but nearly all of the smaller manufacturers, and most of those with medium production, have no method by which they can accurately determine what are the elements of cost or even total costs of particular units or of different grades of a product. This statement may be questioned, but it will be substantiated by any general investigation of factory conditions.

In forecasting the extent of exports of the United States after the war, a glance may be given to statistics of exports before the war began in 1914. The statistics of imports and exports, compiled by the Bureau of Foreign and Domestic Commerce, show commodities in six general classes, as follows:

- A. Crude Materials for Use in Manufacturing.
- B. Foodstuffs in Crude Condition and Food Animals.
- C. Foodstuffs Partly or Wholly Manufactured.
- D. Manufactures for Further Use in Manufacturing.
- E. Manufactures Ready for Consumption.
- F. Miscellaneous.

* "Foreign Commerce and the Tariff, 1899-1915," pp. 67-69.

TABLE II

GENERAL IMPORTS AND DOMESTIC EXPORTS OF MANUFACTURES
READY FOR CONSUMPTION, FISCAL YEAR ENDED JUNE 30, 1914.
COMPARABLE COMMODITIES OF WHICH THERE WAS AN EXCESS OF
IMPORTS*

Classification	Imports	Excess of imports
Fibers, vegetable, and textile grasses, manufactures of	\$81,141,028	\$68,565,558
Art works	35,010,449	33,595,147
Cotton laces and embroideries	33,865,822	33,633,365
Wool, manufactures of:		
Wearing apparel	\$2,268,125	\$119,890
Other	31,047,370	29,379,167
Total	\$33,315,495	\$29,499,057
Silk, manufactures of, exclusive of yarn	\$29,702,323	\$27,394,718
Paper, and manufactures of:		
Paper hangings	\$933,777	\$480,265
Printing paper for books and newspapers	11,075,659	7,285,806
Wrapping paper	1,028,500	495,843
Books, music, maps, engravings, etchings, photographs, and other printed matter not elsewhere specified	6,644,264	2,995,596
Other	7,881,640	1,633,888
Total	\$27,563,840	\$6,900,206
Earthen, stone, and china ware	\$10,629,178	\$6,275,937
Toys	9,084,019	8,274,899
Fertilizers, not elsewhere specified	6,199,554	4,838,651
Cotton knit goods, including hosiery	5,671,863	3,125,041
Tobacco, cigars, and cheroots	5,193,313	5,159,214
Cutlery	2,860,519	1,712,524
Cork, manufactures of	2,647,838	2,185,639
Gold and silver, manufactures of, including jewelry	2,609,130	1,176,903
Perfumeries, cosmetics, and all toilet preparations	2,309,027	688,155
Wood shingles	2,190,170	2,077,707
Brushes, feather dusters, and hair pencils	2,180,853	1,730,944
Buttons and parts of	2,082,029	1,427,657
Oilcloth and linoleum for floors	1,829,596	1,769,193
Aluminum, manufactures of	1,441,253	339,333
Glass, cylinder, crown and common window glass, unpolished	1,356,218	1,044,879
Oil, animal	1,033,851	211,618
Matches, friction and lucifer	882,795	805,059
Electric lamps	653,765	185,496
Pencils and pencil lead (including slate)	642,998	109,054
Sponges	481,973	308,107
Umbrellas, parasols and sunshades, covered with silk or other material, except paper or lace, and sticks for	119,073	89,170
Platinum, vases, retorts, and vessels for chemical use	82,000	10,828
Total	\$302,779,972	\$243,134,059

* "Foreign Commerce and the Tariff, 1899-1915," pp. 54-55.

TABLE III

GENERAL IMPORTS AND DOMESTIC EXPORTS OF MANUFACTURES
READY FOR CONSUMPTION, FISCAL YEAR ENDED JUNE 30, 1914. COM-
PARABLE COMMODITIES OF WHICH THERE WAS AN EXCESS OF EXPORTS*

Classification	Exports	Excess of exports
Machinery, machines, and parts of	\$115,658,814	\$109,182,746
Automobiles, and parts of	33,198,806	31,766,230
Agricultural implements, and parts of	31,963,789	31,703,728
Cotton cloths	28,844,627	16,998,826
Oil, mineral, naphtha, and all lighter products of distillation	27,352,685	25,951,945
Leather, manufacture of:		
Boots and shoes	\$17,867,234	\$17,460,003
Other	3,030,158	17,839,460
Total	\$20,897,392	\$9,620,543
Structural iron and steel	\$12,535,063	\$12,154,643
India rubber, manufactures of	11,008,493	9,448,681
Rails for railways, steel	10,259,109	9,909,570
Wire, and manufactures of	9,934,614	8,670,552
Photographic goods:		
Cameras	\$664,006	\$416,716
Motion-picture films, not exposed	4,264,722	3,375,162
Motion-picture films, exposed	2,282,924	870,751
Other	2,220,148	2,142,903
Total	\$9,431,800	\$6,805,532
Tobacco, manufactures of:		
Cigarettes	\$4,775,308	\$4,680,700
Other	2,714,503	2,548,695
Total	\$7,489,811	\$2,132,005
Explosives	\$6,272,197	\$5,414,860
Soap	4,939,002	4,118,359
Musical instruments, and parts of	3,358,631	1,281,897
Lead, manufactures of	2,610,207	2,549,358
Phonographs, etc., and materials for	2,512,320	2,360,882
Oil, vegetable, fixed or expressed	2,408,307	2,063,199
Abrasives	2,114,632	2,066,803
Bicycles, tricycles, motorcycles, etc.	1,842,225	1,585,944
Starch	1,825,230	1,416,308
Copper, manufactures of	1,327,037	1,142,363
Straw and palm leaf, manufactures of	799,507	324,752
Asbestos, manufactures of	687,073	295,736
Blacking (including shoe paste and polish and other)	649,395	607,257
Hair, manufacture of	344,756	220,982
Candles	283,018	266,730
Aeroplanes, and parts of	226,149	193,888
Zinc, manufactures of	158,544	107,363
Plates, stereotype and electrotypes	72,752	21,581
Ivory and manufactures of, and scrap	63,180	10,766
Total	\$351,068,965	\$300,394,061

* "Foreign Commerce and the Tariff, 1899-1915," pp. 56-57.

Large importations of materials for use or further use in manufacturing indicate a healthy condition of domestic industry. Tariff differences and discussions center around Class E—manufactures ready for consumption. In the fiscal year ended June 30, 1914, total general imports amounted to \$1,893,925,657, while total domestic exports amounted to \$2,329,684,025, an excess of exports over imports of \$435,758,368. During the same year general imports of Class E amounted to \$449,318,214 and domestic exports of that class to \$724,908,000, an excess of exports of \$275,587,786. Ten years earlier this excess amounted to only \$95,877,128.

Table II is a list of commodities of which the imports exceeded in value the exports. Table III is a list of commodities of which the exports exceeded in value the imports. Some imports and exports, not strictly comparable in their classifications are omitted from both lists. The list of imports includes art works and goods of fine grades made largely by hand; the list of exports includes articles manufactured in factories having quantity production.

GROWTH OF OUR FOREIGN TRADE

There are reasons for believing that Americans generally do not realize the extent and remarkable increase of the foreign trade of the United States, especially exports, during the decade preceding the war. Table IV shows the growth in imports of the four greatest commercial countries from 1902 to 1912, the latter year being the last for which comparative statistics are available. It will be seen that in the increase of imports of manufactured goods, the percentage of the United States was considerably larger than the percentage of the United Kingdom, and considerably less than the percentage of either France or Germany. By Table V, showing the growth of exports from 1902 to 1912, it appears that in increase of exports of manufactured products the percentage of the United States was very much larger than the percentage of any other of the four countries.

The wonderful progress that the United States made in expansion of exports in years preceding the war has been many times accelerated since the war began in 1914. The United States now has an export trade far larger than that of any other nation

TABLE IV

AMOUNT AND PER CENT OF INCREASE OF TOTAL IMPORTS AND IMPORTS OF MANUFACTURED PRODUCTS OF THE UNITED STATES, UNITED KINGDOM, GERMANY, AND FRANCE DURING THE 10-YEAR PERIOD FROM 1902 TO 1912*

Country	1902	1912	Increase 1902 to 1912	
			Amount	Percent
United States:				
Total imports.....	\$969,316,870	\$1,818,073,053	\$848,756,183	87.56
Manufactured products.....	415,169,956	724,335,583	309,165,627	74.47
United Kingdom:				
Total imports.....	2,597,599,803	3,668,029,653	1,070,429,850	41.21
Manufactured products.....	649,142,907	902,574,348	253,431,441	39.04
Germany:				
Total imports.....	1,340,178,000	2,544,458,000	1,204,280,000	89.86
Manufactured products.....	262,514,000	498,610,000	236,096,000	89.94
France:				
Total imports.....	848,042,000	1,588,544,400	740,502,400	87.32
Manufactured products.....	149,980,300	311,540,600	161,560,300	107.72

* "Foreign Commerce and the Tariff, 1899-1915," p. 74. The classification by the four countries is not exactly the same, some commodities classed as manufactured products by one country being grouped by another as raw materials. *Ibid.*, p. 73, where imports for each year 1900 to 1912 inclusive are shown by countries.

on earth, and without doubt much of its gain during the war period will be retained. During this period many American manufacturers who previously had no intention or desire to go into foreign trade, have built up a profitable business in the four quarters of the globe. They have lost their timidity about venturing out, have advertised in foreign countries, have sent salesmen to distant lands, have manufactured goods to suit the special needs of people living in different climes, have learned how to pack goods securely, have met varying credit requirements, and in short, have learned the methods of getting and filling orders and building up a profitable trade the world around.

While Table V shows that the exports of Germany were increasing faster than those of the United Kingdom or of France, yet

TABLE V

AMOUNT AND PER CENT OF INCREASE OF TOTAL EXPORTS AND EXPORTS OF MANUFACTURED PRODUCTS OF THE UNITED STATES, UNITED KINGDOM, GERMANY, AND FRANCE DURING THE 10-YEAR PERIOD FROM 1902 TO 1912*

Country	1902	1912	Increase 1902 to 1912	
			Amount	Percent
United States:				
Total domestic ex-ports.....	\$1,333,268,491	\$2,362,696,056	\$1,029,427,565	77.21
Manufactured prod-ucts.....	464,415,450	1,117,665,614	653,250,164	140.66
United Kingdom:				
Total domestic ex-ports.....	1,379,282,731	2,371,072,866	991,790,135	71.91
Manufactured prod-ucts.....	1,103,853,780	1,873,740,295	769,886,515	69.75
Germany:				
Total domestic ex-ports.....	1,113,364,000	2,131,766,000	1,018,402,000	91.47
Manufactured prod-ucts.....	735,182,000	1,430,142,000	694,960,000	94.53
France:				
Total domestic ex-ports.....	820,674,600	1,295,531,800	474,857,200	57.86
Manufactured prod-ucts.....	458,297,800	756,154,700	297,856,900	64.99

*"Foreign Commerce and the Tariff, 1899-1915," p. 75, where exports for each year 1900 to 1912 are shown by countries.

with her loss of the war, Germany has lost her foreign trade organization. Under the restrictions imposed on her by the Peace Conference, especially those depriving her of adjacent territory and colonies (which deprives her of raw materials), especially also the heavy indemnities to be paid by her, it is not to be expected that during the first years, perhaps many years, of peace her industrial system can be restored or her foreign trade reestablished on the basis of anything like its former extent or degree of prosperity.

Germany has one product that America needs—potash. Her manufactured products exported to America consisted largely of drugs, dyes, hosiery, toys, laboratory ware and optical glass,

but domestic manufacture of these commodities has greatly increased during the last four years, and for them the United States will not hereafter be dependent on any other country.

It seems probable that the United Kingdom will be the great commercial rival of the United States in the future, as (see Table V) it really has been in the past in volume of manufactured exports and total exports.

THE FUTURE

But encouraged, elated even, by recent successes in foreign fields, American manufacturers will make a vigorous effort to hold much of the new trade abroad that has been gained during the last four years, and even to extend business to regions where our commerce has heretofore not reached. Those sections of Russia that are overrun with Bolshevism, and any other sections that may be similarly affected, will of course be avoided until stable governments are established. In promoting foreign commerce American manufacturers will receive invaluable aid from the Bureau of Foreign and Domestic Commerce, whose commercial attachés are stationed in the leading countries, and whose trade commissioners visit all parts of the world to observe and report trade opportunities open to Americans. For prosecuting this work of fostering foreign trade, which has heretofore yielded rich results, Secretary Redfield asks for considerably larger appropriations.

The Bureau of Foreign and Domestic Commerce publishes a daily called *Commerce Reports*, to which anyone may subscribe. It contains reports and letters from representatives of the bureau in foreign countries and from American consuls throughout the world. It will give American manufacturers and exporters information of the greatest value as to industrial and trade conditions in all countries, valuable especially because of the rapid changes that will now occur. Under the provisions of the Federal Reserve Act, seventy-five branches of American banks have been established abroad, and doubtless many more will be established, which will give Americans in foreign trade the benefits of banking facilities and credit reporting agencies that they have not heretofore enjoyed.

Under the provisions of the Webb Act, which relieve export associations from provisions of the Sherman Act intended to

prevent monopolies, about sixty associations have been formed, and these with others which may be organized will probably cover manufacturers in all important lines of goods exported. They will give to Americans, so far as selling to foreigners is concerned, the advantages that Germans have enjoyed under their cartel system. The United States now has, or very soon will have, the ship tonnage needed for carrying its goods to the marts of the world, without dependence on bottoms sailing under foreign flags as has been our humiliating position since the Civil War.

It is gratifying to note that our exports during December, 1918, and January, 1919, were very much larger, in quantities as well as values, than they were during the corresponding months of 1913 and 1914. The rivals of the United States in international commerce will not for some time be in a financial condition to extend the long credits which they gave to overseas customers before the war began. Financial assistance to American exporters will be furnished by the War Finance Corporation, which was established by Congress, in 1918, with an authorized capital stock of \$500,000,000, all to be subscribed by the government, and with the right to borrow up to six times the amount of the paid up stock issue. Early in April this corporation issued bonds to the amount of \$200,000,000, which were subscribed for immediately. These bonds are payable in one year, with 5 per cent interest. The corporation will make loans to exporters up to \$50,000,000 for a maximum of five years. Adequate collateral will be required to equal at least 125 per cent of the loan, and probably trade acceptances or other paper representing merchandise will be acceptable.

American enterprise has been intensified by the reënergized work done during the war. The commercial vision of Americans has been greatly broadened during the last five years. In 1914 the United States was exceeded in exports by only one nation, to which, in fact, it was almost equal. If the volume of export trade held in that year is retained with the addition of only a fraction of the subsequent increment, and if the rate of expansion is even as much as the rate before the war, our country will secure for itself undisputed leadership among the commercial nations of the world.

The International Trademark Question

By LAWRENCE LANGNER

New York City

THE war which has come to a close has created such high labor costs in Europe, that now more than ever before, industrial conditions there closely approximate those existing in the United States. As a result, it may safely be said that the world now enters into the era of quantity production. However much one may regret the fast-disappearing craftsmanship of the individual non-specialized worker, the greater satisfaction which came to the craftsman from the love of his handiwork, it seems plain that from now on the craftsman is passing out of existence, and the world-industry of the future must develop along American lines, that is, on the basis of the production of standardized articles upon a large scale, thus allowing the economic law of division of labor to come into play and to result in the cheapening of the product. This transition from an industrial world based on craftsmanship into the modern highly-standardized factory system has, of course, though accelerated in Europe by the war, been of long duration.

Early industrial craftsmen, as well as the artists, were in the habit of marking their handicraft with their names or with some insignia which would identify their product and serve as a means to denote the origin of the articles made by them. Practically all the ceramics of ancient Rome and the silverware of the Middle Ages were inscribed with the name of the individual craftsman whose handiwork it represented. This practice of making goods with a distinctive trademark has come down to us through the ages, and represents the realization of the desire on the part of the honest craftsman in all stages of the world's history, to be known by his good handiwork, creating what is termed in modern parlance "goodwill" on the part of his public. With the growth of the factory system, the development of international trade, and in particular the development of international advertising, the question of marking goods to denote their origin has become one of far greater importance than ever before.

In the early period of development of modern industry, the number of goods sold under a distinctive trademark was relatively small, and the market itself restricted. Today a single trademark very often serves to identify millions of dollars' worth of goods sold in every part of the earth to all kinds and conditions of people. Thus the modern international trademark must not only be a mark which is suited to the needs of the markets of the country in which the goods originate, but it must, in order to be a valuable means of identification, be distinctive in all kinds of markets. There has thus grown up a requirement for the use, in modern industries, of a special kind of trademark, which may be called an international trademark. Experience has shown that very few of our leading American manufacturers have appreciated the necessity for giving attention to this aspect of international trademarks, since they adopt the same method which was used by the early Roman and the mediaeval craftsman. They use merely their names to identify their product, failing to remember that there are persons with the same names in most of the Anglo-Saxon parts of the world, and that these names themselves, printed in Roman characters, are unintelligible to almost half the world.

SELECTING AN INTERNATIONAL TRADEMARK

In the selection of an international trademark, there must be brought to bear a knowledge of the psychology not merely of a nation but of all nations. The best international trademark is that which has the most universal appeal in the widest sense of the word. A picture is usually an excellent international mark as it has a meaning not only for the educated public but also for the uneducated. If the mark is a picture of an object which is known equally to the educated and to the illiterate, it will be especially suitable. Perhaps the best example of such a mark is the picture of an animal or a bird, such as the picture of a lion, a tiger or an eagle. Such marks are of universal interest, and cannot fail to be distinctive, no matter what the country may be in which the mark is used. On the other hand, invented words, words in the English language, proper names, signatures, etc., all of which are favorite marks with American manufacturers, cannot be recommended as international trademarks. Where a

manufacturer has already adopted a trademark which is unsuited for foreign trade and has spent a great deal of money in advertising it in this country and abroad, it is of course practically an impossible matter, and also an unbusinesslike matter, to change the trademark. In such a case, the representation of some animal or bird, which will be distinctive in the foreign market, should be combined with the other mark, and the dual mark will be sufficiently distinctive for international purposes.

A very good example of such use, is the Borden "Eagle" trademark, which is used on all products made by Messrs. Borden & Company throughout the world, and is probably a more valuable trademark in the Far East than the name "Borden," which means nothing to the illiterate.

NATIONAL TRADEMARKS

Another aspect of the trademark situation which has not been dealt with by publicists is the question of using trademarks in order to give the goods the appearance of a national origin different from the real origin. Thus, it was a common practice for a German concern, prior to the war, to use trademarks which would indicate that the goods made by it were of British or American origin, because of the greater national reputation of those countries. Great Britain attempted to stop this practice, so far as the British markets were concerned, by means of its Merchandise Marks Act, under which the customs authorities were empowered to stop any shipment into Great Britain of German goods which did not bear upon them the words "Made in Germany." Contrary to what has sometimes been thought to be the case, this did not have the effect of making the mark "Made in Germany" a mark of quality. On the contrary, the words "Made in Germany" became a derogatory mark, since the majority of German-made goods did not have the same durability as English-made goods of the same grade, and as a result, even the better-made German articles came under this ban of popular disfavor in Great Britain; so that the expression "Made in Germany" was, even before the war, a term of contempt among the more reliable traders.

There has been considerable agitation in this country for the compulsory use of a national United States trademark, which is

to be registered in the trademark offices all over the world, and is to be used by our manufacturers to indicate that their goods are of American origin. This proposal has found disfavor on the ground that the poorer grade of American goods marked in this way may create a bad impression for American goods as a whole, so that more would be lost than would be gained as a result of a national trademark. Another danger arising from the use of the mark "Made in U. S. A." as a general proposition, is the possibility of manufacturers in other countries similarly marking their goods "Made in U. S. A." and shipping them to the various foreign markets, such as the South-American countries, where they would be passed off as American goods. There would be very little possibility of preventing such false marking except by special treaties. It is not the usual custom for our manufacturers to mark their goods "Made in U. S. A.," and it is the writer's opinion that they should not rely upon such marking, but should always use a good international trademark, protected by registration in the various foreign countries.

IMPROPER REGISTRATION OF TRADEMARKS

There has been considerable activity in the improper registration of trademarks by importing agencies in the various foreign countries, these agencies registering the well-known trademarks of American concerns, and using the ownership of the mark thus acquired, as a means of holding the agency of these concerns. This abuse has been generally due to negligence on the part of the American manufacturer. It cannot be said adequate warning of the situation has not been given in the past few years, as our Department of Commerce and agencies throughout the country have made this situation abundantly clear to the American manufacturer and exporter.

THE TRADEMARK AS AN ECONOMIC WEAPON

Prior to the war, a number of American trademarks were registered through America by concerns who were often suspected of being the agents of German concerns. Only recently, the writer came across the registration of the well-known American trademark "Bakelite" in the Argentine by the German exporting house of Hecht, Pfeiffer & Co. This unfair registration of trade-

marks can very readily become an economic weapon if it is carried out systematically and advantage is taken of the lack of interest which has so often been shown by American exporters.

A number of attempts have been made to bring about the international protection of trademarks, but these attempts cannot be regarded as entirely successful. This is due to the fact that the registration of a trademark is a domestic affair, and the protection afforded can extend only within the territory of the country, and subject to the conditions which exist in that territory. For instance, the country granting trademark protection cannot possibly concern itself with the question of whether that trademark protection will interfere with trademark protection granted by another country to another manufacturing concern doing business in that other country. In view of the fact that only a relatively few trademarks are in use internationally, while the majority of trademarks are used in domestic commerce and are not employed in international trade, it is practically impossible for any country to have a trademark system which is adequate both for domestic trademarks and for international trademarks. Thus, in the United States, our trademark laws are perfectly adequate for a trademark used in this country, but cannot give an English concern, which has built up a great business under a trademark in Europe, an opportunity of protecting the trademark here when the goods are not sold in this country, and when an American manufacturer has been using the mark here in all good faith.

INTERNATIONAL REGISTRATION

As a result of this condition, conflicts of interest are inevitable. The attempts made to remove these conditions by international registration at Berne, Switzerland, and more recently by the establishment of the Pan-American Union Trademarks Office, only seem to emphasize the difficulties which are encountered. Under these unions the registration of an international mark in the international office covers not one country, but a number of countries. As a result, any person who wrongfully registers a trademark in the international office is thereby enabled to accomplish more simply and more effectively a wrong in a number of countries and more trouble results from such international

registration systems than would exist without them. Thus, only recently, our attention has been drawn to the registration of a number of American trademarks by an Austrian in the International Trademarks Office of Berne, as the result of which he has secured trademark registration in a considerable number of countries at a very small cost to himself. In other words, international registration in a single office puts a premium upon piracy.

The writer is of opinion that the international trademark problem can be met only by an honest attempt to comply with the domestic requirements of the various foreign countries, and that where a conflict of interests arise, the later user of the mark must change his mark for that particular country rather than attempt to rely upon some form of international registration to protect him. Unification of the trademark laws of the world would not ameliorate the conditions. In the United States we already have a unified Federal Trademark law, which applies to all the states of the Union, and notwithstanding this fact, it often happens that a trademark which has been used in the eastern part of the United States comes into conflict with a trademark which has been used in the western part of the United States, though as much as twenty years may elapse before the trade expands to such a point that there is a conflict between the two traders.

The Supreme Court of the United States has held that under such circumstances, each party owns the trademark in the states in which he used it. This is what goes on, on a larger scale, in the international trademarks field. It would not be fair to permit any concern, merely by registering a trademark in an international trademark office, to cover the world completely by this single registration, thereby preventing others from using it in a field in which they are not using it themselves, and monopolizing some device which is capable of use without in any way hurting their business rights.

The trend in industry towards industrial combinations utilizing a single trademark may, in the end, result in a more uniform system of trademarks throughout the world, by reducing the number of marks used internationally. Combinations for export under the Webb-Pomerene Law result in the distribution and sale of goods made by a great number of American manufacturers

under a single trademark in the various foreign countries. Such trademarks will become extremely well known internationally, and may well form a class of international marks which could be registered in an international office for all classes of goods. Meanwhile, the American exporter who is developing a business in foreign markets must not neglect to register his trademarks in the countries in which he is doing business.

NO INTERNATIONAL COURT FOR UNFAIR INTERNATIONAL TRADE

The amount of unfair competition which goes on between individuals in a nation can readily be ascertained by reference to our court records. Nothing is so common, in an era of competition, as for one trader to attempt to take advantage of another, and nothing is more attractive than to attempt to steal the goodwill built up by a successful manufacturer. Human nature does not change beyond the boundaries of a nation. In international competition, the same conditions prevail exactly, with the disadvantage against the honest trader in that there are no international courts before which he can appear for justice in international trade. Under the circumstances, it behooves our government, if it is to secure fair conditions for American traders abroad, to busy itself with treaty arrangements with countries where it is often impossible for an American trader to register his trademark as for instance, Cuba, where an American trademark cannot be registered unless it has already been registered in the United States Patent Office. The International Patent Law Association, an organization made up of the leading international patent practitioners in this country, has recently been formed with a view to remedying international conditions in trademarks, as well as in patents, and it is one of the objects of this Association to conduct an active propaganda, directed to the desirability of arrangements which will remove those disabilities which prevent the registration of trademarks internationally; for instance, the fact that registration in one country is often dependent upon registration in another, and the conditions which prevent the real owner of the mark from recovering it from a person who has pirated it.

We are told that wars are brought about as a result of the desire of one nation to gain an economic advantage over another;

the ill-feeling which so often accompanies competition, is much aggravated by unfair trade tactics. The Japanese have been particularly active in simulating American trademarks in the Far East trade, and such activities are not conducive to good feeling between the nations. The piracy of international trademarks might well result in a breach in commercial confidence between a nation habitually attempting to copy American trademarks, and this country, so that those who are interested in international coöperation, and good-feeling between the nations, would do well not to overlook the importance of the subject of International Trademarks.

What America's New Merchant Marine Means to the World

By EDWARD N. HURLEY

Chairman, United States Shipping Board

THE world was never before in such desperate need of raw materials supplied through overseas tonnage as it is today. The need of the hour is SHIPS.

After four years of unexampled privation brought on and fostered by the ruthless destruction of merchant ships on the one side, and a blockade of the seas that gave way only for vessels freighted with munitions of war, food and other supplies to uphold the strength of the Allied nations on the other side, the period of readjustment and rehabilitation is at hand.

This period of intensive demand is not a passing flurry to call for momentary attention and then pass on among the forgotten troubles of a day. The workers of the world must buckle down to long years of hard labor to replenish supplies, to repair damage done and set the old globe up in business again as a going concern. And this will require SHIPS—MORE SHIPS.

The great demand is for raw materials, chiefly foodstuffs. The cry for food is insistent. In this crisis the United States takes high place. The creation of her new merchant marine, born of the breath of war, now finds an exalted usage in the succor of starving and desolate peoples, most of them innocent victims of the ravages of war.

Because we had no delivery system of our own upon the seas our seaports began to choke with our own products before the war was a month old. The sudden close of the war brought the same congestion, withdrawal and reallocation to old trade routes of ships that had been ferrying our goods across the Atlantic. But the force of this blow, which might have proved a staggering one under old conditions, has been almost entirely taken up by the shock absorber of our new-built merchant marine. The situation has been saved by SHIPS.

This is what happened when war was declared across the sea:

An accumulation of freight brought on congestion at our seaports. There were no ships to carry our exports. The demands and exigencies of war called them from our shores. We were the most powerful of all the neutral nations. But we had practically no overseas shipping of our own and our commerce had to depend almost entirely on ships of alien flags—a dependence that failed us at the first note of war.

It was but natural that those in control of ships under foreign register should place their own war necessities above the demands of our trade. We could only stand helpless and watch the products of our farms and our stockyards pile up on piers and in warehouses while prices fell at an appalling rate. The cause of all this was the lack of SHIPS.

With the signing of the armistice and the cessation of hostilities our seaboard terminals once more began to choke with the products of the farm and stockyard, mine, mill and factory. It was the same story over again. The Allies, no longer dependent upon American armies and American war materials for their national safety, suddenly withdrew many of their best ships from the American trade. American business, therefore, was immediately thrown upon its own resources. It looked like a hard winter. But we missed the jolt and are coming safely through the period of readjustment. The pull that brought us out of that hole was furnished by OUR OWN SHIPS.

Anyone could safely predict that the war would come to a sudden end. But no one could say when that end would be. When it did come it found the grain and meat storage terminals of the seaboard and Great Lakes filled to overflowing with an unprecedented accumulation of American foodstuffs. According to the records of the Department of Agriculture there were in storage on November 1, 350,000,000 bushels of grain, 250,000,000 pounds of dairy products, and nearly 1,000,000,000 pounds of meats. Had the American merchant marine not been on hand to move these products the consequent crash in prices would have been a terrible blow not only to the American producer but to the raw materials market of the world.

The ships of our new merchant marine have been moving our surplus wheat crop, estimated at 450,000,000 bushels, at the rate of 36,000,000 bushels a month. This is an export movement

50 per cent greater than the average for the eleven months ending November, 1918, and for the entire year of 1917.

On the first of February the requirements of the newly organized European food relief service, as announced to the Shipping Board through the Food Administration, called for the immediate export, chiefly to European neutrals, of half a million tons of American flour, pork products and milk, and of a quarter million tons of various foodstuffs for Belgium. The December and January programs for Belgium relief totaled another half million tons of foodstuffs. It was expected that foreign shipping would be available to carry a considerable share of this tremendous quantity of American foodstuffs, but so many of the foreign ships returned to their ante-bellum trade routes immediately after the armistice was signed, that the bulk of the task fell to our new merchant marine.

Of a total of 1,200,000 tons of foodstuffs for relief purposes exported up to March 1, more than 80 per cent was carried in American vessels, and with few exceptions, in cargo carriers built in American shipyards during the past year. All told the new merchant marine provided for the export of more than 1,500,000 tons of the surplus farm products of the country in the four months following the signing of the armistice with the requirements of the army accounting for between 2,500,000 and 3,500,000 deadweight tons of our merchant fleet.

These record-breaking accomplishments have been due to the energies of American shipbuilders who in little more than a year and a half built more than double the number of launching ways than are now owned by all other nations combined, and are building more shipping than is being constructed by all the rest of the world put together.

There is no reason to believe that we are building too many ships. There are many good reasons to prove that we are not. The need for ships was never so great as it is at present and this demand will continue for many years—will last until the world catches up with the tonnage it requires for the purpose of its normal commerce.

The shortage in world tonnage due to the war can be placed by conservative estimate at 16,245,000 gross tons. This figure represents eight times the total of seagoing ships built in the

United States in the last year. The record of superproduction of ship tonnage is unprecedented in shipping annals. And the normal tonnage of the world which the upbuilding of our merchant marine will help to restore was adapted to the simple commercial needs of civilization and not to the additional task of restoration and rehabilitation of the destructive forces of war—the added problem of today.

The whole world is short of raw materials. Factories the world over are being restored to the production of articles adapted, not to the needs of war, but of peace. Discharged soldiers will be employed and women brought into industry will remain. The output of manufactured commodities will be great. The world will experience the largest movement of raw materials that it has ever known and a consequent movement of manufactured goods. The need of tonnage for overseas shipping is evident.

Our merchant marine is stronger today than ever before. It is growing faster than it ever grew before. The faster we build ships the greater will be our independence. We lead all other nations in agriculture. We are the world's greatest producer of raw materials. There is one way that we can best serve ourselves and humanity through the distribution of our plenty. It can be expressed in one word: SHIPS.

American Tariff Policies From an International Point of View

By WILLIAM SMITH CULBERTSON

Member, United States Tariff Commission

THE League of Nations should have no jurisdiction over the highness or lowness of the tariff which this or any other fully sovereign nation wishes to enact. The amount of the tariff, it is true, has been and may continue to be a subject for negotiations between governments. Many commercial treaties have dealt with tariff rates and prohibitive duties have been the subject of protests and even trade wars. Nevertheless, the minimum rates which each nation collects at its border should be determined by its need for revenue, or food and raw materials, or by the stage of its industrial development. In the last analysis the determination of these rates is a domestic question. It is outside the jurisdiction of the League of Nations and should be reserved to each individual nation.

DISCRIMINATIONS

On the other hand, tariff discriminations, reciprocity arrangements and preferences should be specifically placed under the jurisdiction of the league. A fundamental principle of association among nations having the common interest of fostering good will in international affairs should be equality of treatment. Tariff treaties or systems which favor one nation against another inevitably lead to irritation and suspicion. Colonial monopolies maintained by preferences granted to the mother country encourage in the excluded nations the ambition to break down the barriers or it impels them to seek by diplomacy and armaments to obtain for themselves exclusive colonial spheres. The use by a nation of its economic power to obtain special tariff concessions or a system of preferential tariffs between colonies and the mother country is inconsistent with harmonious world relationships. Excluded nations are less injured and favored nations are less benefited than is commonly supposed; nevertheless, the very idea of discrimination has awakened fears and suggested retaliation.

EQUALITY OF TREATMENT

Equality of treatment was encouraged among nations before the war by the limited application of two principles—unconditional most-favored-nation treatment among nations and the open door in dependent colonies, protectorates and spheres of influence. The former was the corner-stone of the system of commercial treaties among European nations and the guarantee that no nation, entitled to the position of “a most-favored-nation,” would be placed at a disadvantage against another. The latter principle—the open door—was adopted by several nations in their colonies and was established for large areas of the world by treaty or by international agreement. In many instances, however, the force of these principles was broken by exceptions and qualifications which left untouched the most flagrant cases of discrimination and inequality of treatment—such cases as the preferential tariffs of the self-governing British dominions and the French colonial empire.

The traditional policy of the United States, which led us to avoid entangling alliances with European states, has had its effect on our commercial policy. From the beginning of our national existence we have insisted upon a form and interpretation of the most-favored-nation clause in commercial treaties different from those accepted by European nations in 1914. We have sought special favors from foreign countries by tariff bargaining and we have established preferences in our favor in the Philippines. We have pursued these policies with little or no reference to their bearing on world affairs and in almost all cases without any intent of injuring excluded nations or any appreciation of the possible complications which might arise. Now, however, we are entering actively into world politics. More, we are championing the ideal of equality of treatment. It is very essential, therefore, for us to appreciate what this principle implies in our own practices and policies.

MOST-FAVORED-NATION CLAUSE

As has been stated, our position on the most-favored-nation clause has differed from that of European governments. We have contended that concessions should be made only to those who would reciprocate; that when a concession was made “freely” without a return to one nation, it would be extended to all others

entitled to most-favored-nation treatment, but when the concession was made upon a condition, it would be extended to other nations only when they granted equivalent concessions. Our object was equality of treatment, sought by offering equality of opportunity to bargain for the advantages which we had to offer.

The Tariff Commission Report on Reciprocity and Commercial Treaties says,

The willingness to treat with all nations equally and to offer the same concessions to all in return for compensatory concessions by each was essentially a step forward. It was no part, however, of the American policy to give to some states "freely" such concessions as were given to others in consideration of reciprocal concessions. The earliest American statesmen adopted the "special bargain" principle, and the American government has acted ever since in conformity with the conception that commercial concessions are to be given for specific compensation, and that most-favored-nation treatment implies and requires nothing more than the granting of opportunity to purchase, on the basis of reciprocal give and take, treatment identical with, or similar to, that accorded other States.

Historically there is much to be said for the American position. It had at first a liberalizing influence on commercial relations and was a natural accompaniment of our independent position in international affairs. It became, however, the support of special bargaining and reciprocity treaties with their undesirable results. After the middle of the nineteenth century European states began experimenting with tariff systems and were led to adopt as a basis of their bargaining the unconditional form and interpretation of the most-favored-nation clause in their treaties. They began with the assumption that the most that any nation should or could in the long run expect in commercial relations is equality of treatment. Constant bargaining was recognized as undesirable. The advantage of the unconditional clause was that it automatically and immediately generalized concessions made by one state to another, thus maintaining equality of treatment and making new bargains unnecessary every time two nations adjusted their tariff relations. It guaranteed that no country would be placed on a less favorable basis than another. It is an effective means of generalizing concessions and automatically prevents discriminations.

During the war a disposition began to appear among European nations to abandon their pre-war position on this clause and to

adopt the American. Many public men despaired of making the clause effective because of the ways in which it had been nullified by discriminations concealed in tariff classifications, by customs regulations, and in other ways. The war itself which produced such programs as "Mittel Europa" and the resolutions of the Paris Economic Conference turned men's minds toward devices for discriminations and trade wars. The leading European nations have denounced their commercial treaties and are now considering their future policies.

However much the unconditional form and interpretation of the most-favored-nation clause has been evaded in the past, it is more desirable than the conditional form and interpretation, and its adoption by the nations as one of the clauses in the final treaty of peace is essential as a step to make effective the principle of equality of treatment. We in America must face this fact and answer whether or not we are willing to abandon our traditional policy. The evasion by concealed discriminations of the principle of equality is no excuse for a policy of open discrimination but rather conclusive proof of the need of a league of nations to make effective in spirit as well as in letter the principle embodied in the unconditional most-favored-nation clause. As long as we or any other people insist upon the conditional form of the most-favored-nation clause, we retain a ground for friction between nations and the world is deprived of one of the most effective means known to modern international commerce for establishing equality of treatment and international fair dealing.

BRAZILIAN PREFERENCES

The test of a nation's devotion to the principle of equality of treatment comes when particular cases are taken up for consideration. Little progress will be made if each nation seeks to preserve every vestige of its traditional rights and declines to give up something in the interests of international harmony and good will. Experience demonstrated to the nations of Europe that preferential arrangements among themselves were undesirable. May it not be desirable now to extend the principle of equality? Can the self-governing dominions of the British Empire seek admission as equal units into the League of Nations and at the same time continue to maintain their preferential tariffs? Can

we in America advocate equal treatment and continue to accept preferential treatment in the Brazilian market?

Under the reciprocity sections of the tariff acts of 1890 and 1897 the United States experimented with special reciprocity bargaining and treaties. A number of agreements were entered into, which obtained for the United States special and in some cases exclusive concessions. The last of these agreements was terminated by the tariff act of 1909 and a fundamentally different principle of tariff bargaining was adopted.¹ Our arrangement with Brazil—not a formal treaty at all—is the only surviving remnant of this reciprocity period. Under section 3 of the tariff act of 1897 the President was authorized to impose a penalty duty of three cents a pound on coffee from countries which treated American products unequally and unreasonably. Brazil was particularly dependent on this country as a market for its coffee. No agreement was negotiated but in 1904 our government suggested to Brazil that unless preferences were granted certain American products, particularly wheat flour, in Brazilian markets, the penalty duty would be imposed. The British flour millers in Brazil and the Argentine wheat interests were opposed to preference and their influence developed opposition in the Brazilian Congress. In spite of the opposition, however, preferences were granted to certain American products, including wheat flour and, with the exception of 1905, have been renewed each year with some change in the articles affected. Some growth in the trade of the favored articles has resulted from preference and there was a general growth of American trade to Brazil as a result of the new interest stimulated in that market.

COLONIAL PREFERENCES

A second general principle contributing to make effective equality of treatment which should become an integral part of the final treaty of peace is the "open door" independent colonies, protectorates, and spheres of influence. The practice among nations with reference to the open door in their dependent colonies has been varied. Great Britain, Germany, and The Netherlands for different reasons maintain the open door in the import tariffs of their dependent colonies. Spain, Portugal, Italy and particularly

¹ Section 2.

France have established preferences in favor of their own goods in their colonial possessions and granted colonial goods preferences in their markets. The United States also excludes other nations from an equal participation in the trade of the Philippine Islands. No nation alone should be asked to abandon its preferences but with the growing recognition of the fact that dependent colonies are a trust which more advanced nations are called upon to administer should come the universal adoption of the open door.

OUR PHILIPPINE TARIFF POLICY

Our tariff policy in the Philippines was affected by the treaty of peace signed at Paris in 1898 in which we agreed to grant to Spain equality of treatment in Philippine ports for a term of ten years. In the course of the discussions at the conference, the Spanish commissioners raised the question whether it was the purpose of the United States to grant equality of treatment in the Philippines to all nations or merely to Spain. The American commissioners replied:

The declaration that the policy of the United States in the Philippines will be that of the open door to the world's commerce necessarily implies that the offer to place Spanish vessels and merchandise on the same footing as American is not intended to be exclusive. But, the offer to give Spain that privilege for a term of years, is intended to secure it to her for a certain period by special treaty stipulation whatever might be at any time the general policy of the United States.

This statement was a mere prediction of our future policy and not a promise. It is not likely that this statement indicated an intention to maintain the open door in the Philippines. The discussion on this point did not attract wide interest. An open-door policy, however, was maintained for a time. For three years after the United States took possession of Manila, the old Spanish tariff slightly modified and shorn of the Spanish preferences was retained and applied impartially to the imports of all countries including America. In the ports of the United States, Philippine goods, on the other hand, were charged the full rates in the Dingley Tariff Act.

This state of equality, however, was not satisfactory to American business men. Trade showed little tendency to follow the flag and complaints arose. It was recognized that because of our treaty obligations American goods could not be given a preferen-

tial rate in the Philippines over Spanish goods until after the expiration of the ten-year period. But there was a demand for a revision of the Philippine tariff in order to give a preference to this country in the classification of goods. Such a revision was made in 1901 by the Philippine Commission and enacted by the Congress of the United States in 1902. Before enactment this bill was submitted to the American exporting interests for their criticism and suggestions. Various schemes for concealed preferences were advocated and subsequently adopted. One discriminatory provision, for example, had to do with the weighting of cotton goods. Foreign competitors weighted their goods while Americans did not. The goods were, therefore, assessed for duty by weight without allowance for the weighting of materials. A further preference was given to fabrics of widths peculiar to American looms.

The tariff was revised again in 1905. In bringing in the bill the committee said: "The general purpose of this bill, as of the former act, is to give the United States such benefits as there are arising from the classification of goods." Faulty information concerning the classification of cotton goods, was relied upon however, in drafting this bill and the intended preference did not result. The error was corrected the next year. Concerning the effectiveness of the new revision, the report of the Philippine Commission for 1907 says:

The total values of such cottons imported increased \$1,677,750, or from \$6,642,329 for 1906 to \$8,320,079 for the year just ended, or 25 per cent. The increase in the value of cotton goods imported from the United States was even more marked, rising from \$278,796 for 1906 to \$1,056,328 for the year just ended, an actual increase of \$777,532 in value or nearly 400 per cent. This result is directly traceable to the amendment of the Act of 1905 enacted by Congress on February 26, 1906. This act differentiates narrow cotton fabrics from the so-called double width goods, and thus provides a comparatively low rate of duty upon goods produced in the narrow (American) looms.

No one in this country opposed these discriminatory practices. There was apparently no consciousness of unfairness in the adoption of them. They were openly advocated by the Republican Party, which was in the majority, and criticised by the Democrats on the ground that the discriminations were not sufficiently effective.

In 1909, when the ten-year guarantee to Spain of the open door expired, a tariff of about 20 per cent was placed on all goods enter-

ing Philippine ports from foreign countries and a preference was granted to American goods by admitting them free of duty. This act remains in force today. Whatever may have been the intention at the time of the Treaty of Paris the open-door policy as to imports into the Philippines was formally abandoned at the earliest date on which it was legally possible.

In the meantime the policy with respect to imports from the Philippines into the United States underwent a similar transition. The decision of the United States Supreme Court in the *Insular Cases* late in 1901 made impossible the imposition of tariff duties upon goods entering American ports from the Philippines, unless such duties were specifically provided for by an act of Congress. The issue of the desirability of such duties was thus raised. Some felt that trade from the Islands to the United States should be free as a matter of justice to the Filipinos. It was argued that having taken the Spanish market from them we should give them preferential access to our own. Others advocated preference in order to take the trade of the Philippines from foreigners. On the other hand, sugar, rice, and tobacco interests in the United States feared competition from the Philippines and insisted that even though a debt might be owed to the Filipinos, it should not be paid at the expense of their particular industries. A compromise was arrived at by which Philippine goods, with the exception of certain specific articles, were admitted free to American markets and on those specified articles, among which were sugar and tobacco, a reduction of 25 per cent from the Dingley rates was granted. All moneys collected from imports from the Philippines were turned back to the Philippine treasury.

In 1909 free entry was granted to all Philippine goods except rice with the provision that in the case of sugar and tobacco the privilege of free importation should be limited to a specified amount annually. The limitations were removed in 1913 and since then the products of the Philippine Islands which do not contain more than 20 per cent of foreign material are, when shipment is made direct, admitted free into the United States. They are exempted from the internal revenue tax of the Philippines but pay the equivalent of the internal revenue tax collected on similar articles in the United States.

Export taxes were a peculiar feature of the Philippine fiscal

system and they were utilized as a means of discrimination. They were confined to a few of the principal Philippine exports. It was provided in 1902 that the amount of these taxes should be deducted from the duties paid by the Philippine goods in American ports, and in the case of goods admitted free to American ports the export taxes were refunded if the goods were delivered and consumed in the United States. This provision made this country the principal market for Manila hemp and benefited directly certain large American consumers of this product. All export taxes were repealed in 1913 and the Government Act of 1916 makes them unconstitutional.

In developing their closed-door policy in the Philippines, the American people have maintained an attitude both naïve and uncritical. They have pursued this policy at the same time that they have urged the open door in China and only occasionally has a leader raised his voice to point out the inconsistency. We have enacted discriminatory legislation in the Philippines apparently with little appreciation of its narrowness. Genuinely liberal forces, in fact, have at times sanctioned it on grounds of justice to the Filipinos and fairness to ourselves. Our policy, however, appears in a different light when it is placed side by side with the French policy in Indo-China and the Italian policy in Eritrea, and when it is viewed not from the purely nationalistic standpoint but from the standpoint of world policy and the League of Nations.

THE SPIRIT THAT GUIDES THE NEW ERA

More important than anything else in the commercial negotiations of the immediate future is the spirit which guides the nations. Each nation has a right to security and to the preservation of its essential interests. At the same time, however, it should be considered seriously what may be given up in order that wider interests may be further advanced. The cynic may sneer at ideals of international good-will and world peace but if we once admit that nations cannot, by coöperation, further them, we confess the bankruptcy of our civilization. There are problems arising in international intercourse which nations individually or bargaining two by two cannot solve adequately. By the establishment of a league of nations we merely extend government

where it did not exist before. International government like any other, however, must have principles which form the basis of its administration. Among these principles unquestionably should be unconditional most-favored-nation treatment among nations (Australia, New Zealand, South Africa, and Canada being considered nations for this purpose) and the open door in all dependent parts of the world. If these principles are accepted by the United States our traditional position on the most-favored-nation clause goes, the Brazilian arrangement becomes untenable, and the open door must be adopted in the Philippines.

May there be any exceptions to these general principles of equal treatment? Undoubtedly there are cases where close political and economic bonds would justify even from an international standpoint a reciprocal arrangement. Our reciprocity agreement of 1902 with Cuba falls in this class. Under it American products are granted concessions in Cuba's import tariff and Cuban products enjoy preferences in American markets. A discontinuance of this arrangement would be a distinct injustice to *Cuba*. Her prosperity depends upon her political and geographic relations with the United States and no other country could take our place. But such cases are comparatively few and should be permitted only when approved by the League of Nations. The important thing is to adopt the general principle of equal treatment and to recognize what it implies.

The United States and Mexican Finance

By EDWARD D. TROWBRIDGE

Author, *Mexico Today and Tomorrow*

THE question of Mexican finance, and especially that phase of it which is involved in the claims of foreign creditors of Mexico, is one of the post-war financial problems which, sooner or later, must receive the serious attention of the United States. In the abstract the general question of Mexican finance is not only one of suitable investment for American funds, but includes the broader problem of so aiding and safeguarding the stability of the government of a neighboring country as to prevent a recurrence of internal disorder and consequent international friction. Involved in the general problem are very complicated phases having to do with the claims of creditors of Mexico—claims of holders of Mexican securities and claims of individuals and corporations for losses or damages incident to the revolutionary period through which Mexico has passed. To arrive at any permanent and satisfactory solution of the problem each factor must be considered with reference to its relation to the whole, and with this in view I propose to take up, in proper order, the immediate conditions and the future needs.

CLASSES OF CLAIMS AGAINST MEXICO

Broadly speaking, claims against Mexico may be divided into three classes, namely: (1) the claims of holders of direct obligations of the Mexican government; (2) claims of individuals or corporations for damages sustained during or as a result of the revolution; and (3) claims of security holders of the National Railways of Mexico. Strictly speaking, the third class should be included in the second, but it will be treated separately for reasons which will be explained later on.

It is not the purpose of this article to deal with individual claims or items, or to attempt any study of questions of priorities of claims or of guarantees involved, but rather to deal with the question as a whole. Without entering into any analysis of the various items constituting the Mexican national or government

debt, this item will be treated as a lump sum. The national debt proper, including various external loans either secured or unsecured, an interior loan, and various minor items such as scrip issued to pay government employes, and a redemption fund to take up bonds given in exchange for the so-called Vera Cruz money, amounts to a total of some \$300,000,000, United States currency. This figure does not include some state, federal district and municipal loans for which the national government is guarantor, and these items, with unpaid and accrued interests, may bring the total to a round figure of \$350,000,000 (for convenience all figures and calculations will be reduced to their equivalent in United States currency). A considerable portion of this total is in loans at $4\frac{1}{2}$ per cent, but for round figures may be taken at 5 per cent, calling for annual interest payments of about \$17,500,000.

DAMAGES ATTRIBUTABLE TO THE REVOLUTION

The next item to be considered is the debts of the Mexican government due to damages done to property during the revolutionary period. There is a popular impression that this item will involve dealing with colossal figures, but this impression is not, I believe, justified by the facts in the case. The principal losses may be grouped under the following heads: destruction of equipment and buildings belonging to the various railways, government-controlled lines and privately-controlled lines; damages to tramway, electric light and other public utility properties; destruction of or damage to factories, sugar mills and other industrial plants; destruction of buildings and equipment on farms, plantations and ranches; loss of live stock; and, finally, financially considered, loss of life. The National Railways system estimates that it will require 50,000,000 pesos, or \$25,000,000, to get back into full operating condition, but, due to high prices of materials now prevailing, this estimate should probably be increased to about \$40,000,000. The National Railway lines constitute about two-thirds of the railway mileage in Mexico, so that, for purposes of estimating the government's liability due to losses of railway property, we may assume, roughly, a total figure of \$60,000,000. As the National Railways will be considered under a separate head, only one-third of this

amount need be, for the moment, considered, although technically, of course, the government must pay the National Railways. Urban public utility properties suffered small damage through destruction, and while hydro-electric properties lost considerable copper cable, their generating plants, as a whole, suffered little. The great mining properties at Pachuca, El Oro, Cananea, Guanajuato and other points suffered only nominal physical damage. Many small mining plants were obliged to close down, and in some, perhaps many cases, their buildings were wrecked or damaged as a result of local disorders. The losses on this class of properties were relatively small, as the damage, while apparently great, was really superficial. Properties in the great oil fields have suffered no damage. Factories have been damaged here and there, but, generally speaking, they are located in large centers which were under constant control, and their losses have been insignificant. Sugar mills in the state of Morelos were wrecked by Zapatistas, and while the complete wreckage of the buildings and machinery on the *haciendas* in this state involves a serious delay in getting back to a production basis, the fact remains that the intrinsic values of the properties—lands, canals, ditches, roads, and so forth—have only been slightly affected. On the average farm or ranch property in other sections buildings remain intact, and the losses are confined to portable equipment, live stock killed or driven off, and so forth. In other words, the potential earning power of rural properties, the basis of real wealth in Mexico, has not been seriously affected. It is true, that, due to disordered conditions, many large agricultural properties have earned nothing, and that, in consequence, their owners have no working capital with which to resume business, but, considering the matter as one of government liability for physical losses, the damage has been relatively small. It is, of course, very difficult, without exhaustive examination, to determine or estimate what the sum total of physical losses to properties will amount to. At a rough guess I should say that the legitimate claims of foreign individuals and corporations will not exceed \$60,000,000, including \$20,000,000 for railway losses, as noted above. If a sum of \$10,000,000 be added for payments which may be made for loss of life, and a further sum of \$30,000,000 be added for awards to Mexicans for damages to rural properties,

then the whole amount for which the government would be held liable would amount to a total of \$100,000,000. This would call for an annual interest charge, at 5 per cent, of \$5,000,000.

In considering the question of losses we can include only such losses as would be allowed by an impartial commission charged with the settlement of the matter. Doubtless the total of claims filed, or to be filed, will greatly exceed the estimate given above, partly because of the general tendency, in dealing with a government, to inflate claims, and partly because the actual losses due to destruction of property, through loss of earning power or through depreciation of neglected property, often exceed the purely physical loss. For instance, the total foreign investment in Mexico amounts to about \$2,000,000,000, and the greater portion of this investment, due to the disturbed conditions or to the fall in the value of the peso during the paper-money period, produced little or no revenue from 1914 to 1916 inclusive, representing, in three years, a total loss, at 5 per cent, of \$300,000,000. While this loss is a real and actual loss, it would not be possible, even with a wild stretch of imagination, to ask the government for compensation for it. The government cannot be held responsible for lack of business, nor could it be held to account for poor earnings because of depreciation in the currency. In so far as revenue was lost because of disturbed conditions or because of currency values, the situation may be compared to the indirect losses due to a fire in a large manufacturing plant—namely, that while these losses may be actually greater than the direct fire losses, no claim for them can be properly made against the fire insurance company.

LIABILITIES OF THE NATIONAL RAILWAYS COMPANY

The affairs of the National Railways Company are so interwoven with those of the government that the liabilities of the railways company may almost be considered as government liabilities. The government's position in the matter is far from satisfactory. Its interest is fivefold: first, through subsidies granted to aid in the original construction of the roads; second, as guarantor of interest and principal on a large part of the bonds issued by the railways company; third, as holder of two-thirds of the common stock and of a considerable portion of the pre-

ferred stock of the company; fourth, as debtor through liability (as a government) for destruction of railway property; and fifth—and perhaps most important of all—through intangible but general interest in the shaping of the policy of a company whose affairs are of vital importance in the development of the resources of the country.

The lines were built by private capital but with the aid of the government, which, at a later date, in order to control future policy, secured, in connection with the consolidation of various companies, a control of the common stock, and was thereby placed in nominal control of the system. The government now finds itself in the position of having aided substantially, by subsidies, in the construction of the railways, of having expended a large sum in acquiring control of the common shares of the system, and of being tied up with large guarantees, covering interest charges and so forth, while its control is technically subject to the claims of various sets of mortgages, interest on which is badly in arrears. In other words, the government, in spite of large expenditures and guarantees, had only a weak equity in the property, and the upheaval in Mexico, through stopping earnings, has placed that equity in jeopardy. The government feels that for reasons of public policy it cannot relinquish control of the system, but it realizes that the claims of the various sets of bondholders must be considered.

The matter is greatly complicated by the fact that the National Railways Company, at its best, has never made a satisfactory showing. The company has, roughly, \$250,000,000 in common and preferred shares, and \$250,000,000 in bonds, notes and accrued interest, or a total of half a billion dollars in capital liability. Gross earnings from 1909 to 1913—before the revolution—were more or less stationary, the maximum reached in any one year being 64,000,000 pesos, or \$32,000,000—a relation of 6.4 per cent as between gross receipts and capital account. Assuming that operating expenses would be two-thirds of gross receipts, there would remain a net of 2.3 on the total capital liabilities, manifestly an absurdly low figure. The highest net earnings of the system in any one year were 21,300,000 pesos, at a rate of about 2 per cent of the present capital liabilities. It is quite clear that there will have to be a reorganization of the finances of the

system on a basis of cutting down the total capital liabilities, and particularly with the object, in order to avoid future disaster, of reducing the fixed charges. Such a reorganization would naturally make provision for sufficient new money to provide additional equipment and thereby increase the earning power of the property.

A THOROUGH REORGANIZATION IMPORTANT

Holders of securities of the National Railways must recognize the fact that while the capitalization of the company is moderate for a system comprising some 9,000 miles of track, the capital account is far too high when considered in the light of earning power. The only hope of a great increase in earning power is through a full development of the agricultural resources of the country, and such a development will only be accomplished with colonization and with the creation of a large class of independent small farmers. With present conditions of great estates—6,000 people own a total of 300,000,000 acres of land, or an average of 50,000 acres each—anything like a full cultivation of the soil is impossible, and the country, which has potential productive capacity to support 75,000,000 people, actually imports corn and wheat. For a proper program of development of national resources it seems important that the government should have a dominating voice in the railway question. Aside from this aspect, it seems probable that because of the condition of their finances most of the railways in Mexico—including many lines in which the government has no direct interest—will, sooner or later, come under the control of the government.

Financial houses, in the reorganization of railway properties, frequently make the mistake of trying to satisfy all classes of creditors by the issue of generous quantities of new securities having no intrinsic value and representing only some indefinite hope of value to be created in the remote future. There seems to be a sort of financial fallacy that if a man owns a hundred dollar bond representing fifty dollars in real value, he should receive, in a reorganization, sixty dollars in new bonds, twenty dollars in preferred stocks and thirty dollars in worthless common stock. Under this sort of a scheme the property in question emerges from the reorganization with a little more capital than before,

and while fixed charges are somewhat reduced, and a better appearance created by liberal use of varnish, the property faces a constant struggle due to its waterlogged condition. It is to be hoped that whatever is done with the National Railways will have in view the creation of a sound financial structure.

This is especially important because of the necessity for a great enlargement of the system in the future. There are great tracts of fertile land which have no railway communication, and any general program which provides for a full development of natural resources will call for an extensive scheme of railway construction. For the present, we may assume that with a financial reorganization and provision of considerable new equipment, the National Railways will be able to earn operating expenses and the major part of their bond interest. It seems improbable that, if properly maintained, the roads can earn all charges even on a more modest capitalization, and it will be well to assume that the government will be called on to pay at least \$2,000,000 and perhaps as much as \$4,000,000 per year to meet deficits. By charging a part of maintenance cost into capital account and by other manipulation of figures a fictitious showing could be made to conceal deficits, but this would only be accumulating trouble for the future.

Mexico needs money for a new government bank, and while the basis on which such money is to be supplied is not yet determined, it may be assumed that it will be self-sustaining, and need not, therefore, be considered so far as the question of government financial needs is concerned. It may also be assumed that the reorganization of the National Railways Company will provide money required for the rehabilitation of the system, and that the railway question need not enter into government finances except as to the question of an annual deficit as outlined above.

THE SITUATION SUMMARIZED

Summarizing the situation, then, we have the following items to be considered:

First: Existing government indebtedness amounting to roughly \$350,000,000, calling for the payment of interest charges of about \$17,500,000 annually.

Second: Payment of claims for destruction of properties, damages to railways (excepting the National Railways), etc., amount-

ting to \$100,000,000, calling for annual interest charges of \$5,000,000. To avoid raising this amount of money it seems probable that, under a proper organization of government finances, creditors in this class would take government bonds for a large portion of their claims.

Third: The National Railways need \$40,000,000 for rehabilitation of their lines and for new equipment. This money will be provided, presumably, in a financial reorganization of the company, and it is assumed that increased earnings will take care of all fixed charges of the system except for a deficit of some \$3,000,000 per year.

Fourth: Money is required, to an amount which may be placed at \$50,000,000, for a new bank of issue, but if this money is obtained it may be assumed that it will be self-sustaining—in other words, that no question of interest charges, so far as government finances are concerned, need be considered.

Fifth: The government requires a considerable sum for general purposes and for the organization of an efficient rural police force to enforce order and to run down bandits, whose operations, in some sections, prevent resumption of agricultural pursuits. It is calculated that \$50,000,000 will be required under the head of general needs, and this would call for an annual interest payment of \$2,500,000.

Taking items one, two, three and five, there would be a total annual interest charge of about \$28,000,000. More than half of this is for interest on old debt, at a fixed rate and presumably creditors under item two would be satisfied with 5 per cent bonds if they were assured as to prompt payment of interest. Money required under item five would probably have to be raised on a basis which would cost the government 6 per cent or more, and possibly total interest charges may amount to \$30,000,000.

A POLICY OF MODERATION THE BEST

There has been more or less of idle talk of a loan of \$300,000,000 or \$400,000,000 to Mexico to enable her to pay off all her debts. Such a plan would provide for more money than is needed, assuming that creditors take a sane view of the matter. The provision of such a sum would inevitably result in extravagance, no matter what restrictions were imposed as to the disposal of the money,

and Mexico is, under a more modest program, far more likely to learn thrift and to realize the necessity of efficient administration than if she were in a position to command large sums of money. The development of two or three years of reconstructive program, accompanied by enforced thrift, will, later on, place the country in a position to obtain all the money she requires for further improvements.

Mexico has already learned much in thrift, and in place of a deficit, two years ago, of over \$5,000,000 a month, she has, above her current military and civil administration expenses, a small surplus. It is expected that for the current year there will be a surplus of 20,000,000 pesos, or roughly \$10,000,000. This, on a basis of the interest charges estimated above, would leave an annual deficit of \$20,000,000. The total government income this year will be in the neighborhood of \$90,000,000. An increase, therefore, of 25 per cent in income would enable the government to meet all its interest obligations. The amount of the national debt, in proportion to the wealth of the country, is very small, and, once normal conditions are restored, the load will not be a heavy one. Moreover, Mexico has gained, indirectly, through conditions brought about by the world war. To pay interest and meet payments on the principal of huge war debts other countries will, automatically, maintain high prices, so that Mexico, which has had no war expense, will profit by the sale of her products at higher prices than would otherwise have prevailed.

DIFFICULTIES OF MEETING THE DEFICIT

The problem of meeting the deficit of \$20,000,000 is not, however, as simple as it may seem at first glance. The resources of the country are primarily agricultural. Disturbed conditions have seriously curtailed agricultural activity and consequently restricted production. Even where conditions permit resumption of work, the landowners are unable to operate their properties to anything like normal averages because they lack working capital. In many cases in rural districts greedy military chiefs have seized portions of crops and have otherwise discouraged landowners from attempting resumption of agricultural work. The problem is being worked out slowly, but, where a country has gone through several years of chaos it must inevitably take some

time to get back to normal conditions. Taxes on mines and oil production are as high as conditions warrant, and taxes on manufactured products cannot be increased without risk of killing industry. No further increase in taxes can be made on urban property without placing too much hardship on the tenants. Customs duties, if further increased, would only result in the restriction of trade. In other words, for increased revenue Mexico must look to her normal source of wealth, agriculture, and increased revenue from this source will come more or less slowly. It may be worth while, incidentally, to call attention to the general scheme of taxation in Mexico. The whole system is based on production. This scheme has been largely responsible for the existence of estates of enormous size. In the future some equitable form of land tax will have to be provided, but any attempt along this line at the moment would only amount to confiscation of properties.

THE USE OF FORCE UNWISE

For some years representatives of leading financial interests have said that Mexico must be made to pay her debts. Men of supposedly able brains have said that sooner or later the United States would force her to settle. Holders of British securities of concerns doing business in Mexico have said, rather glibly, that as soon as the war was over Great Britain would take the matter in hand, and that their government, either directly or through pressure on Washington, would dictate terms. This sort of talk implies either a refusal on the part of Mexico to meet her obligations, or a desire, through foreign intervention, to dominate the situation. Mexico has made no suggestion of repudiation, but simply has been unable, due to internal troubles, to meet her obligations. Any foreign intervention would be costly for all concerned—in dollars and cents would represent a tremendous expense.

Since we have had a practical demonstration, on a vast scale, of the cost of war, there has been some talk of bringing economic pressure on Mexico. This seems equally foolish, assuming, of course, that there are any hopeful signs in Mexico. Economic pressure can only mean one thing—wringing something out of the country at the expense of greater internal trouble. Mexico has

emerged from a state of chaos, and politically, socially and economically she is making progress. Given some financial help—not only in money but in the support of those interested materially—she will work her way out.

I have no desire to pose as an apologist for Mexico, and fully realize what foreigners and foreign capital have experienced during the past few years. I also realize that there are many serious problems confronting the government—political, financial, social and economic—and that these problems will require much time and patience in their period of solution. It seems to me, however, that a careful study of the situation would convince any reasonable person that the problems are receiving due consideration, and that every day brings Mexico nearer to the point of being able to take care of herself without outside aid or interference.

THE OUTLOOK IS ENCOURAGING

Elsewhere¹ I have dealt at length with Mexico's relations with foreign capital. The general conclusion reached in a study of the situation was that it would be quite useless to make on Mexico demands which she could not meet, and that all having interests in Mexico should unite to aid in a program which will enable her to get on her feet. Discussion of past troubles is idle. What is needed is material and moral aid in a constructive program. In this connection, it is worth while to call attention to the showing of the National Railways Company. That company, during the years 1909 to 1913, earned (gross) about \$2,500,000 per month. Due to revolutionary troubles, paper currency and incidental causes, the earnings of the system dropped, by January, 1915, to \$93,000. In January, 1916, gross earnings were \$501,000, while a year later the figures were \$1,336,000, and today monthly earnings, even excluding traffic handled for the government—troop trains and so forth—exceed \$2,500,000. These figures clearly indicate that Mexico is rapidly "coming back."

In closing, I wish to make reference to the suggestion that Mexico could arrange a foreign loan by pledging certain specific taxes. This idea is a fallacy, as it assumes that such income can be spared. Moreover, financing on this sort of a basis is almost

¹In "*Mexico Today and Tomorrow*" (The Macmillan Company, 1919).

certain to interfere with permanent financial stability. It may be compared to a manufacturing institution which borrows money from a dozen banks, giving its real estate as security to the first, its machinery to the second, its unfinished product to a third, its bills receivable to a fourth, and so on. If anything happens to upset the equilibrium, the claims of the different creditors tear the property to pieces, whereas, with one creditor, there would always be a chance of preserving the property intact. Professor Henry C. Adams² says:

A sound financial policy will not impair the patrimony of the state. . . . It is a fundamental principle of constitutional law that each legislature shall hand down to its successor all the rights and powers and jurisdictions which it received from its predecessor; so in matters of public finance it is incumbent that each succeeding administration shall find as broad a field from which to supply its needs and as fruitful a source of supply as the administration which preceded it.

Mexico's creditors should get together, arrange to give her sufficient money to care for urgent needs, give her time to get back to a normal basis, arranging for resumption of interest payments on a graduated basis, and lay out a permanent financial structure which will put the future credit of the government on a sound basis.

² *Finance*, p. 4.

An International "Gold Fund"

By HENRY PARKER WILLIS

Professor of Banking, Columbia University, New York City

ONE of the promising proposals which has come to the front during the discussion of international settlements growing out of the war with Germany has been that of a so-called "gold settlement fund." Suggestions relating to this matter have appeared in the press from time to time practically ever since the beginning of the Peace Conference at Paris, and discussion of the subject had been in progress on a more or less tentative basis for some time even before the conclusion of the armistice on November 11. These suggestions, although vague so far as expressed in the public press, do not represent an idea of equal vagueness, but on the contrary embody a well matured plan which in its general outlines has the support of many competent students of finance. The problem of putting some such plan into effect, therefore, is not dependent for its solution upon the outcome of any academic discussion, but on the contrary involves only certain easily adjusted matters of technique.

Indeed, the proposal has nothing to do with the war with Germany and the treaty growing out of it, and it is erroneous to speak as if there were any such connection. Nothing has happened since the opening of the war to make such a plan more feasible or on the whole more desirable than it was before, save that the war has demonstrated the dangers and difficulties attendant upon the actual process of shipping gold, while it has also brought into a clearer light relation of credit to gold in international banking. The relation of the war to the proposal would seem to be merely that one outcome of the war may be the establishment of a condition of closer coöperation and friendship among nations which were previously deeply suspicious one of another. In this way it may well be that the foundation of an international gold fund may have been laid, and if so, there is at least one good economic result of the struggle.

PROPOSAL OF FEDERAL RESERVE BOARD

In its annual report for the year 1918, the Federal Reserve Board included the following paragraph:

The successful operation of the gold settlement fund has suggested the possibility of avoiding shipments of gold from one country to another in settlement of balances arising out of ordinary commercial transactions, and the board is ready, if authorized to do so, to undertake negotiations looking to the establishment of an international gold exchange fund, or to assist in any way in its power in negotiations which may be begun by a government department looking to that end. The board realizes that the successful operation of a plan of this kind is dependent upon the stability of the governments concerned, and believes that definite plans cannot perhaps be worked out until a stable peace has been assured. The board would point out the importance of excluding all transactions arising from the adjustment of war obligations and of limiting the work of the fund to current commercial and exchange transactions. The gold deposited in a government bank or banks should be in the nature of a special or trust fund, and all nations participating should deposit their proper proportions of gold. Assuming that the leading nations of the world will be at peace for a long period of years, there seems to be no reason why an international arrangement of this kind should not operate as efficiently as our own gold settlement fund, which has cleared enormous transactions between distant sections of a country of vast area. The saving of loss and expense incident to abrasion and transportation charges and interest on gold transferred will be enormous, and the advantage to the commerce of the world will be incalculable. It will probably be necessary in the beginning to limit participation in the fund to the United States and the entente allies, and to a few of the leading neutral nations, but it is conceivable that all civilized countries may eventually be participants.

It is thus clear that there is available for the consummation of this gold settlement plan not only a well matured basis of theory and investigation, but also a definite banking organization which stands ready to undertake the work of installing the new system. The essential suggestion contained in this paragraph is found in the sentence which refers to "the importance of excluding all transactions arising from the adjustment of war obligations and of limiting the work of the fund to current commercial and exchange transactions." Thus limited, the board's recommendation may be regarded as the further working out or development of the gold settlement fund installed in the federal reserve system and successfully transacting the inter-federal reserve bank business at the present day.

ORIGIN OF GOLD SETTLEMENT FUND

Although the theory of clearing had been elaborately studied and recorded during the years prior to the adoption of the Federal Reserve Act, comparatively little had been said about systems of national clearing. The provisions of the Federal Reserve Act with respect to both clearing and collection constituted a very distinct contribution to the discussion of currency and banking reform—a contribution which was essential in its character because of the fact that under the Federal Reserve Act it was not proposed to install a central bank but a group of independent banks which must, therefore, communicate in some way with one another. Indeed the idea embodied in the gold settlement fund was in many ways novel in the field of American banking thought, and it is precisely at these points of novelty that suggestions were furnished which afterward afforded the basis for the present proposal to establish an international fund.

The clause of the Federal Reserve Act relating to this matter was found in a general clearance and collection section of the original law which included among other provisions a sentence authorizing the Federal Reserve Board to act as a clearing house for federal reserve banks or to designate some one federal reserve bank to act as a clearing house for all. The mechanism by which this general provision, whose intent, however, was sufficiently clear, was subsequently worked out and put into effect, is found in the report of the preliminary organization committee of the federal reserve system, which after several months of investigation rendered in June, 1914, a report, most of whose recommendations have since been accepted as the basis for the organization of the practical work of the federal reserve banks. This statement can best be understood by quoting from the report of the preliminary organization committee in question the following paragraph relating to the instalment of the gold fund. The matter is not only of importance historically but now assumes great significance prospectively because of the fact that the gold settlement fund of the United States is today practically the only exemplar from whose experience may be copied the provisions which will be necessary for the successful development of the proposed enterprise, if undertaken. The plan proposed by the committee was as follows:

To settle the balances between reserve banks, growing out of these various transactions, a clearing house is suggested, as provided in the act, in the clause which specified that: "The Federal Reserve Board . . . may at its discretion exercise the functions of a clearing house for such federal reserve banks or may designate a federal reserve bank to exercise such functions. . . ."

If one of the federal reserve banks should be chosen as a clearing house, for convenience of location it might be the Chicago bank; but this function of clearing would be better assumed by the Federal Reserve Board. For many reasons it would be well to establish the clearing house at the national capital. Since each reserve bank will carry a single account with every other reserve bank, subject to simultaneous debit and credit, the bulk of the interchange of business will clear itself. Balances will arise partly on account of the seasonal changes which will alter the debit and credit relationship between the districts, and partly on account of the fact that membership in the system will not be proportionately equal as between national and state banks in different regions.

The plan herewith proposed is based upon the requirement that each federal reserve bank deposit with the Federal Reserve Board clearing house all of its gold beyond that which will be sufficient to take care of local needs. This gold deposit, carried on the books of each reserve bank in a separate item as a part of its reserve funds, can be used in either of two ways or in a combination of them to effect settlement which will be explained later. Settlement need not be made between reserve banks oftener than weekly, since to require daily settlement might prevent the operation of the natural clearing effected by the interchange of ordinary business transactions. Therefore, at the close of business on each Thursday, each reserve bank should wire the clearing house the amount of the balance and should state whether debit or credit relations exist between it and other reserve banks. Allowing one day, Friday, for adjustment of any differences in the advices received, the clearing would be effected on Saturday. How this shall be done depends upon a consideration of the following possibilities:

The gold deposited with the clearing house may be credited upon a simple set of books to each bank so depositing. Clearing would then be effected by a charge and credit on the books, and advice would be made to the reserve banks. This is the simple plan, but it has one apparent disadvantage in that the banks would have no tangible evidence of the ownership of the gold other than a book credit. Consideration might, therefore, be given a plan of issuing certificates in large denominations against the proposed gold deposits as clearing house currency certificates are now issued. Upon the direction of the Federal Clearing House, the debtor reserve banks would mail these certificates to the creditor banks to pay balances. These two plans might be combined so that, although the clearing of balances would be effected by book transfers of gold at the Federal Clearing House, the debtor banks could anticipate this settlement by mailing certificates to creditor banks prior to the day of settlement. Both these plans, however, seem less effective and more cumbersome than the first plan. Very little (if any) gold would ever need to be transferred between the reserve banks, and such operations would be limited to transactions between the banks and the clearing house. The banks, in turn, would be able to loan or borrow, buy or sell

gold in dealing with each other, and the transactions would be arranged through book transfers at Washington.

EXPERIENCE UNDER FUND

While it would be interesting to detail at length the practical experience had in the operation of the gold settlement fund at Washington, established in the early part of 1915 along the lines mapped out in the committee report just cited, it will suffice for the present purpose to draw only a very few general lessons from the proposal then made. Those who disbelieved in the practical feasibility of such a method of settling transactions over the country as a whole urged that the settlement should be confined as narrowly as possible in its scope and that the adjustment should not take place very frequently. Accordingly, the settlement fund cleared only in round numbers (multiples of \$1,000) and cleared only one side of the accounts between the banks. Moreover, as a concession to prejudice, it was agreed to gather the actual gold of the gold settlement fund into the hands of the Federal Reserve Board itself, and not only this, but to have the gold as thus collected and stored in the Treasury of the United States represented by gold certificates of \$10,000 denomination, which should be physically in the possession of the officers of the Federal Reserve Board. The custody of these certificates was accordingly entrusted to the Secretary's office of the Federal Reserve Board, and at the outset the "transfers" in the gold settlement fund were physically effected by changing the ownership of or title to the gold certificates thus in the custody of the board.

It required an experience of only about three years to modify this plan in the direction of simplicity, while retaining all of its general theory. In consequence, the gold settlement fund is today simply a trust fund in the hands of the Treasurer of the United States and represented by an account on his books, while transfers are effected by clearing both sides of the accounts of all banks with one another and permitting transfers to occur in any desired sum. Since the 1st of July, 1918, moreover, the clearance has been effected daily, so that today we have in operation a daily system of clearance between federal reserve banks involving the transfer of ownership in a trust fund held by the board through the Treasury Department, such transfers being effected by a book-

keeping process and being evidenced only by the changes in the accounting of the banks themselves and by the certificates issued by the custodians of the fund at Washington. On this basis transfers now occur at the rate of about one billion dollars weekly.

That the fund works well, that without it the immense operations of the Treasury Department during the period of American belligerency could not have been effected, and that the use of this system of clearing has effected an enormous saving by avoiding movements of gold and currency from one part of the country to another, is today admitted and needs no demonstration. The practical question in connection with the proposed international fund is therefore simply this: Are there conditions arising out of international relationships which are essentially different from those arising between different parts of a great country like the United States? This, in one form, is very similar to the question which was asked when it was proposed to establish a number of federal reserve banks. At that time it was pointed out that in most foreign countries a single central bank existed, but when in reply the suggestion was made that the United States in wealth, in area, and in population was equal to several such foreign countries and as such could be regarded as entitled to several central banks, there was no answer.

APPLICATION TO INTERNATIONAL CONDITIONS

Before considering the application of the idea internationally, it is worth while to observe that subsequent to the initiation of the gold settlement fund in the United States, and as a result of observation of its successful working, an attempt was made through negotiations between the United States and the South American nations to bring about the organization of an international gold fund for the peoples of the Western Hemisphere. What was then done has been described in the *Federal Reserve Bulletin* for March, 1919, in the following language:

The growing interest in the possibility of an international gold clearance fund, especially since the report of the Federal Reserve Board for the year 1918, recalls earlier efforts in this direction made by the International High Commission. This body, established by the governments of American Republics, and consisting of national sections, each of nine jurists or financiers with the Minister of Finance as chairman, had from the outset the task of bringing about more stable financial relations between Latin America and the United States, especially

through the establishment of the gold standard, or gold exchange standard wherever not in effect. Study of this problem led to the conviction that two steps would greatly facilitate the eventual extension of substantial assistance by the United States to those Republics of Latin America which were in need of help to set their currency systems on a firm basis, first, the use of an international clearance fund, and, secondly, the use of a money account. The executive council of the commission prepared in the early summer of 1916 a draft of a convention, with a view to provide for the inviolability of such a fund. The draft and explanatory memoranda were in due course submitted to the Ministers of Finance and to the diplomatic officers of the Republics participating in the work of the commission. After careful consideration the governments of seven countries have expressed a willingness to conclude the convention with the United States, and the matter is the subject of serious study in other countries.

Delay in the practical application of the system thus devised, has not been due to any unforeseen obstacle in the way of putting the proposal into effect, but has been solely the product of the usual postponements involved in getting diplomatic action from a number of countries, coupled with the natural and inevitable tendency to await post-war conditions before finally embarking upon a plan whose success would be greatly furthered by freedom of movement for specie. It is enough to say that the proposed gold fund for the peoples of North and South America has commended itself to the governments of seven countries whose officers have committed themselves to a belief in the feasibility and desirability of such an international arrangement.

INSTALLATION OF PROPOSED FUND

It is desirable that if any such plan as is now under consideration should actually be adopted, it should be applied upon the most effective, simplest and most desirable basis, without regard to individual or national prejudice or self-interest. First of all, it may be well to consider exactly what such a fund would do, following the analogy of experience had under the federal reserve system. The most obvious purpose of the fund is that which its name implies, viz., "clearance" or "settlement." This occurs in the gold settlement fund just as in every other clearing house, through the obvious process of offsetting claims against one another. The only difference is that which arises out of the fact that the clearance is made by telegraph. Bank A in Dallas owes Bank B in Minneapolis \$500,000. Bank B in Minneapolis owes

Bank A in Dallas \$450,000. A balance of \$50,000 therefore exists in favor of Bank B. Now if these two banks were situated at the same place their representatives would meet and exchange bundles of checks and drafts, with the result of "washing out" \$900,000 of the aggregate indebtedness, leaving a balance of \$50,000 to be paid by one bank and \$50,000 to be received by the other. This might be settled by an actual transfer of gold or by the transfer of a check on another bank. Under the gold settlement fund what happens is that the checks and drafts are exchanged by mail, while the "settlement" occurs in Washington by telegraph—that is to say, each bank takes the others' word for the statement that it has a given amount of claims falling due. If through error the statement turns out to have been unwarranted, correcting entries are easily put through, but these occur seldom. The gold settlement machinery in Washington is a settlement machinery which takes no cognizance of the actual checks and drafts, but leaves them to be interchanged as their owners see fit, and at the pleasure of these owners.

This function of the settlement could occur as easily between, say, the Bank of Commerce in Toronto and the Federal Reserve Bank of Minneapolis, as between the latter and the Federal Reserve Bank of New York. There is no reason why if the Bank of Commerce were a party to the clearing transactions it should not clear as easily as any of the federal reserve banks, notwithstanding it is situated on the other side of the Canadian border. The same would be true if some agency were designated to act for all of the Canadian banks as an aggregate. This is obvious, but a more difficult case occurs if we suppose a participation in the gold settlement fund at Washington to be assigned to the Bank of England. True, the Bank of England is not much more distant from New York by telegraph or cable than is the latter from San Francisco, and communication by cable may be as prompt as the telegraphic communication between Washington and the federal reserve banks. The same thing would be true if the office of settlement were located in London. This office would hear promptly by cable from the twelve federal reserve banks and it would hear through messenger from the Bank of England. The physical process of settling might be substantially the same as under the gold settlement fund.

The first difficulty arises in the fact that such a settlement involving the Bank of England, would necessitate an arrangement for the adjustment of sterling to dollars. Indeed, some of those who are most enthusiastic about the international gold fund have proposed that as a preliminary there be established a uniform money of account. This is in no sense necessary to the establishment of the proposed fund. The difficulty of the situation is apparent only, rather than real as the gold context of the coin is the real consideration. In the first place, the Bank of England might undertake to enter into the gold settlement fund simply for the purpose of adjusting claims in sterling, in which case clearance could be effected with the federal reserve system (and its constituent member banks) for sterling claims, while the Bank of England would clear any such sterling claims as it might be carrying, the result being a balance in sterling either in England or in the United States. Exactly the same arrangement might be made with respect to dollars. Assuming that the participating banks in the United States were possessed only of dollars and sterling, and the Bank of England only of sterling and dollars, or of either, a double clearance might thus take place, there being, in effect, two gold settlement funds operated in one joint management.

This is not at all a fanciful assumption. The experience under the gold settlement fund has furnished an exact analogy to it. Some time after the gold settlement fund was first established it was desired by federal reserve agents to have a fund established for their benefit under exactly similar conditions. This was done, and today the "gold settlement fund," as generally used, includes not only the gold settlement fund proper but also the so-called "federal reserve agents' fund." In the proposed international fund there might be a "sterling fund" and a "dollars fund" with clearance in either at the will of the participating parties. Suppose, however, that after the clearance had been effected it should appear that a balance in sterling was owing to Great Britain by American banks, while a balance in dollars was owing to the United States by British banks. The question would then come up of establishing a rate at which sterling could be converted into dollars on the books of the fund. This would be no more difficult than the establishment of any foreign exchange rate. The rate which should control would be the rate current on the date of

clearance. Or if, as a result of the operations of the fund, the actual market rate were not deemed satisfactory, clearance could be effected at a purely conventional rate determined upon in advance. This would be as fair for one side in the transaction as for the other, since any advantage resulting from it in one clearance would be likely to be offset in the next. Although the operation would become more complex as more and more countries were admitted to the advantages of the clearing, the same principle which has just been developed could be worked out with entire success and with but little technical difficulty. Any such fixed valuation tends, however, somewhat to becloud the situation. The real basis of settlement should be gold by weight and any standard gold coin should serve as a means of settlement at its fine content.

We may now consider a much more difficult phase of this problem of settlement. The purpose of the settlement, as we have taken for granted, is that of avoiding the shipment of gold. We know, however, that shipments of gold grow out of so-called "adverse balances." We further know from our theory of international trade that such adverse balances correct themselves in due time in order to bring about an equality of exports and imports between trading countries. It is not desirable, therefore, to have gold shipped to rectify balances only temporarily adverse. Indeed, if such shipments were to be made on each occasion the service performed by the clearance fund would be more limited than it should be. What is desired is to provide a means of adjusting adverse balances just as such balances between federal reserve banks are adjusted. If, for example, at the present time the Federal Reserve Bank of San Francisco finds that, as a result of heavy payments through the gold settlement fund its ownership of gold in the fund is exhausted, it may if it chooses put more actual gold in the fund. It is more than likely, however, to apply for an inter-bank rediscount, in which case the federal reserve board orders a certain quantity of eligible paper held by the Federal Reserve Bank of San Francisco discounted by (let us say) the Federal Reserve Bank of New York. This means that the Federal Reserve Bank of San Francisco has turned over certain values to the Federal Reserve Bank of New York, while the Federal Reserve Bank of New York has ceded to it a portion of its ownership in the gold fund. The transaction is

essentially a sale of paper for gold. It will not be resorted to without good reason because the Reserve Bank of San Francisco does not wish to lose the discount on the bills which have thus been transferred, but if necessary it will incur this sacrifice of discount rather than be obliged to obtain and ship gold or discontinue making transfers through the gold fund. This is all simple so long as the rediscounts are made between the members of the same system, and so long as there exists a central unifying agency or board which has the power to order the rediscounts made. Needless to say, such discounts cannot cancel a permanently adverse balance but can only give time for automatic adjustment.

But internationally could the same process be applied, or not? Undoubtedly it could through the use of a similar mechanism. If, for example, the central committee of control were authorized to assign bills of certain designated kinds to any creditor country in order to secure the cancellation of the credit balance of that country as stated in gold, it would be possible for a debtor country at any time to offset an unfavorable balance by turning over bills which might be in its possession, provided they were eligible. This, indeed, is exactly what is done today through the mechanism of competitive banking. The operation of the international gold fund would in no respect alter the present situation save in the matter of technique. Indeed, it would not be precisely necessary to have the power referred to lodged in the hands of the central committee since the discounting of the eligible paper could be arranged by cable between any two of the countries which were parties to the clearance. The former method would be the simpler and more certain, but the latter could be employed, if desired. Without some such arrangement for the centralization and immediate recording of international rediscounts and sales of paper designed for the purpose of settling and adjusting temporarily adverse balances, the international gold settlement fund would fail to attain its complete usefulness. With such an arrangement it would be perhaps the most beneficial innovation in international banking since the introduction of cable communication.

SOME THINGS TO BE AVOIDED

As already intimated, there are some practices connected with the operation of any such plan which are to be avoided. In this

respect, unfortunately, the gold settlement fund of the federal reserve system affords instruction, just as it does upon its constructive side. It has been a mistake in some senses that the gold settlement fund in the United States has been a "fund" rather than a "system." It would have been as well had the gold been left where it originated—in the vaults of the federal reserve banks—instead of being massed in the subtreasuries or at Washington. No such system ought to exist at all unless the different members of it are able to trust one another's reliability and honesty. Granted such a degree of trust or confidence, the exact location of the gold is of no consequence. It is not necessary to "deposit" the gold anywhere. If it is set aside or earmarked in the vaults of the participating nation enough has been done. Eventually gold may be shipped if a permanent balance seems to have arisen against one of the holders of gold. No such shipment, however, will take place under ordinary conditions.

Again, it is desirable to avoid any measures which would tend to make the operation of the fund either expensive or slow. It was a mistake in the case of the gold settlement fund that daily clearance was not initiated at the outset. The fact that it was not so initiated gave rise to telegraphic transfers through the fund on non-clearing days, and these at times grew so numerous that it would obviously have been more economical to make the clearing more frequent. It was this fact perhaps more than any other which eventually led to the installation of the daily clearance. Even if there were but few transactions in an international gold settlement fund, the actual clearance should be as often as there was anything to afford a basis for settlement. "Red tape" operations or charges for transfers would constitute another serious barrier to success. The cost of conducting the gold settlement fund has been only about five one-thousandths of one per cent. An international fund would be more expensive, partly because it would necessitate its own staff, but at the utmost it would be an inexpensive method of adjusting indebtedness. Whatever the cost was, it should be divided pro rata among the participants after it had been ascertained.

The establishment of an international gold fund will of course be opposed by various interests and influences. Eventually, however, the application of the underlying principle of the plan will undoubtedly be adopted.

Coöperation in International Banking

By JOHN E. ROVENSKY

Vice-President National Bank of Commerce in New York

DURING the war the allied nations were compelled more or less to pool their resources. While this pooling naturally took the form at first of intergovernmental arrangements, it soon developed into close banking coöperation. Until we ourselves entered the war, moreover, American coöperation with European Allies was largely worked out through the banks, American banks aiding largely in the loans which were made to the various allied nations. As a consequence we are today in much closer touch with the bankers of the world than we have ever been before. Of course, the large banks of New York and a few other large cities have had for many years intimate dealings with bankers in other countries, but bankers in the smaller interior cities of America have rarely had significant contacts beyond our political boundaries. The war has changed this. We find the general body of bankers in the United States—and the same rule applies to the so-called provincial bankers of the European countries—willing and eager to enter into international financial relations. The world has been brought closer together, and international coöperation will from now on be much more common. The markets of the world have also been brought into closer contact. A merchant of Cleveland thinks no more of dealing with Melbourne than he formerly thought of dealing with St. Louis.

OUR FINANCIAL RESPONSIBILITIES

Intimate international banking relations for the future rest, however, on something much more fundamental than the mere breaking down of our past inertia and provincialism. The heavy loans we have placed in Europe give us vital interests there which our banks must look after. The present weakness of our European Allies, and for that matter of our enemies, makes it necessary that our banks should go very much further than anyone dreamed that they would go before the war in financing goods in shipment from one country to another. The financing of goods in shipment,

moreover, will for a time involve much more than ordinary commercial banking. Where international trade under normal conditions is a matter of balancing goods against goods with a mere temporary advance of banking funds to bridge over for a given country the period between heavy imports and heavy exports, there is likelihood that for a time at least the shipment of goods will be a one-sided movement, and that the backflow from Europe and many other countries to the United States will be securities and obligations rather than liquid commodities. The financing of international commerce, therefore, will involve in no small measure not merely the advance of short time funds to merchants, but also the problem of placing European securities with investors, so that funds to pay off the short time bank loans may be obtained. The commercial banker proper may not engage in all of this, but the American banking system as a whole, including investment bankers, private bankers, great bond houses, and the like, will be obliged to do it.

American banking capital, in other words, and the services of the American banker must extend into markets which have hitherto found their own banking systems adequate, not alone for their domestic requirements but also for the service of foreign countries. American banking services must be performed in the great European financial centers, and American banking credits must be at the service of the commerce of those great commercial nations which in the past were more than able to supply the financial needs of their commerce.

RECIPROCITY BETTER THAN COMPETITION

In some form or other our banks must take over work which foreign banks have hitherto performed. The question arises, however, as to whether they shall do this by establishing branches in foreign monetary centers, or whether they shall do it by coöperating with the existing banks of these countries. I believe that we can get further if we do not invade the home fields of foreign banks with our branches, but rather coöperate with them on the basis of *reciprocity*. Reciprocity—this must be the keyword of our future international relations. The Frenchman will look with more favor upon us if we form alliances with his own institutions than if we compete with his institutions by setting up branches in his financial centers.

This has, indeed, been the American practice throughout our history on the whole. Texas banks are almost as far from New York as European banks are. New York banks, however, have had intimate relations with Texas banks, and these relations have not been strictly competitive. Rather, they have done business *with* one another. Texas banks have borrowed largely from New York banks. Generally, Texas banks have kept funds on deposit with New York banks. Texas banks have sent funds to New York for investment, either in short time commercial paper, or in stock exchange loans, or simply for deposit with the New York banks which have paid a moderate rate of interest on the deposits. Credit information has been freely interchanged between New York banks and Texas banks. If a Texas bank found one of its customers growing so big that he could not secure enough loans from his local bank to meet the needs of his business, it has often arranged that he should secure additional loans from its New York correspondent. And so in general throughout the country, banks in the various financial centers have had correspondent banks throughout their respective regions, while New York banks have had correspondent banks in all parts of the country. Funds have flowed freely from one part of the country to another as seasonal variations or other causes led to a surplus of loanable bank funds at one point and a scarcity at another. Of course, our federal reserve system has been devised to make such coöperation much more effective.

None the less, America has remained a country of independent banks. We have today around 30,000 banks of all kinds in the United States, each an independent center, each officered by men whose interests are wrapped up in the progress and success of the locality in which the bank is placed. Our banks have been local banks serving the interests of their own localities rather than subject to control from greater institutions hundreds of miles away. In no small measure, the marvelous development of the United States has been due to the vigor, independence and initiative of our independent country bankers, who, however much they might be aided by counsel, information and funds from the financial centers, were none the less not hampered by the necessity of submitting every transaction to the approval of bankers in the financial centers.

Had the great banks in American financial centers possessed authority to establish branches in smaller places to compete with, and perhaps drive out of existence, the country bank, our banking history would have been one of turmoil and bitter political struggle. As things stand, relations among American banks are friendly and the interchange of banking services is highly efficient.

HOW TO PROFIT FROM PAST EXPERIENCE

Some criticisms have been made of our American banking system on the ground that it is impossible that 30,000 independent institutions could coöperate efficiently in a great crisis. The great struggle through which we have just passed has proved the contrary. Without authoritative control, and acting primarily by suggestion, the federal reserve board, the federal reserve banks, and the leading bankers in the various financial centers have been able to organize and marshal the banking resources of the country in a manner that has been superb. Even so delicate a matter as the rationing of credit to the customers of the banks, discouraging good customers from borrowing in order that funds might be freer for the government's financial operations or for more essential industries, something which it was supposed that independent competing bankers could not easily do, was brought about during the war with wonderful thoroughness and efficiency. We carried the peak of the load of war finance with ease.

There is little likelihood that our system will ever be called upon again to bear so great a strain. That we did it, when fundamental factors are considered, is really no marvel. Given the patriotism of our local banks—and they are patriotic; given their intelligence and knowledge of local conditions—and they possess these; given their desire to accomplish the ends which the government indicated as necessary and desirable; they were able to meet the emergency with much more efficiency and with much less friction, each banker acting in the light of his knowledge of local conditions, than would have been the case had we had thousands of branches subject to general rules of thumb which left little discretion with the local managers.

SOME DEFECTS OF BRANCH BANKS ABROAD

Our American banking experience, then, gives us the guiding principle which we would do well not to ignore in extending our

international banking relations. We should seek to utilize wherever possible the existing banking machinery in the countries which we desire to help. If we establish branches among them we shall need years to build up organizations which will be in harmony with the spirit and purposes of these foreign countries. We shall need years to gain the credit information and experience which is essential to sound banking. We have gone far in the United States in standardizing credit information and in standardizing credit conditions. Foreign bankers and foreign business men have used radically different credit methods from our own. Credit information is, on the whole, much more confidential with them than with us and consequently not fully available except to those maintaining close relations with the foreign banks. It is far better for an American bank to operate through a foreign bank which possesses intimate knowledge of credit conditions in its sphere of operations than for the American bank to do the business directly itself. Thus it would be easily possible for a New York bank to establish a branch in Lima, Peru, under a competent hired manager sent from America. But from such a branch we could get no such services as would be rendered by a friendly Peruvian bank. The officers and directors of the Peruvian bank would be men of standing and influence in the community, intimately familiar with its affairs. We could not hire men of this quality to serve in a branch bank in Lima. The point is more obvious, perhaps, if we reverse the supposition. A Lima bank could not possibly be as well served by its own branch in New York as it is by having a leading New York bank as its correspondent.

Of course, there may well be some services which a close affiliation with an existing bank cannot give. This, however, does not necessitate the establishment of a branch. American banks will do better to have resident representatives in the foreign fields who can look after the interests of their clients but at the same time handle the distinctively banking business through a friendly bank of that locality.

This does not, of course, preclude the establishment in exceptional cases of branches of American banks. In undeveloped countries we must open our own export and import houses, our own banks and other agencies. In any country which has, how-

ever, a well developed economic structure and a developed banking system of its own, relations should be developed by utilizing existing institutions rather than by creating new and alien institutions.

The English are by far the most experienced international bankers. Let us hear the opinion of the justly celebrated dean of the banking profession, Sir Edward H. Holden, addressing the shareholders of his great bank, the London City and Midland. He said in part:

There is a difference of opinion among English bankers on the question of foreign banking. One class of banker believes that the proper course is to open abroad branches of their own bank, in which case they will compete with the foreign banks in their own country. Another class believes that the better policy is to work from London in conjunction with the foreign banker, and not to go into direct competition with him. . . . Our fear is that we may make the foreign bankers unfriendly towards us by opening branches in their own countries in competition with them, and that we may drive their business to Germany or New York. If this should ultimately happen, the opening of branches abroad by English banks will have acted prejudicially against London retaining her position as the financial center. . . . Further, if we retain the friendliness of these foreign bankers, they will show a greater interest in their clients dealing with traders in this country than they would show in case we became unfriendly by going into competition with them.¹

Another well-known English banker corroborates this view. Sir Robert Harvey, chairman of the Anglo-South American Bank, referring to Sir Edward Holden's speech, says:

I direct your attention to a statement of policy on the part of the chairman of one of the foremost of these banks who informed his stockholders that he considered it to be an incorrect policy for themselves and similar banks to establish branches in foreign countries, and that he preferred to enter into working arrangements with banks trading outside Great Britain.

This is a policy which we cannot but think is, for a variety of reasons, the correct one.²

It is much more difficult for an American bank to cover the foreign fields by means of banking alliances than by means of branches. Our great banks which have followed the plan of developing foreign alliances have spent years of patient endeavor in the process, while a branch may be established over night. It

¹ The London City and Midland Bank, Ltd., Extraordinary General Meeting, Friday, September 13, 1918, pp. 16, 18, 20.

² London *Economist*, October 26, 1918, p. 593.

is likewise usually more expensive for an American bank to do its business through a banking alliance than through its own branch, but the fruits of a banking alliance are very great and are of a sort that money cannot buy. By a banking alliance, the American bank secures the friendly coöperation of influential citizens of a foreign country—the friendship of men of affairs who cannot be hired for a salary—who have no wish to become the employes of an American (to them, a foreign) bank, but who are glad to enter into an arrangement by which, on terms of equality with us, they assist in promoting the business intercourse of the two countries.

Reciprocity, not colonization, must be the keyword of our plan of international banking.

The International Labor Situation

By W. JETT LAUCK

Secretary, National War Labor Board, Washington, D. C.

BROADLY speaking there are two important aspects to the present international labor problem. The first is definite, concrete and immediate. It has to do principally with the formulation and adoption of certain labor standards, agreement as to which has slowly developed through the medium of international conferences and discussions by socialist organizations, labor unionists and other agencies during the years preceding the war. The conferences which have recently been held directly or indirectly in connection with the Peace Conference have finally resulted in the crystallization and formal announcement of these standards.

The other feature of the international labor problem while more intangible and remote is in reality far more significant and is fraught with more far-reaching consequences. It shows clearly the development of a change in the fundamental attitude of labor towards industry in general. It carries with it a more or less definitely developed program of constructive action which contemplates extreme modification or revolutionary change in the relations between industrial workers and industrial institutions and between the state and industry.—It holds forth the hope of a more complete democracy which is to be attained both by the use of political action and by the exercise of economic power or pressure.

BACKGROUND OF THE PRESENT MOVEMENT FOR INTERNATIONAL LABOR STANDARDS

International action affecting labor has in past years taken shape in (1) international socialistic organization; (2) formation of international trade union bodies; (3) establishment of semi-public and private associations of students and workers interested in social and political reforms; (4) official conferences and treaties. The non-official trade union and socialist organizations have formed the background of the official phases of the movement. They have developed the motives for the action taken and have

supplied the political and economic sanction to the international labor movement.

INTERNATIONAL SOCIALIST MOVEMENT

The Socialist Internationale is the present organized expression of the international socialist movement. It dates formally from 1864 when Karl Marx and a group of radicals organized the International Workingmen's Association. This association continued active for less than ten years, but was revived in 1889. Its latest International Congress was held at Copenhagen in 1910 at which delegates from thirty-three nations were present. The earlier association held seven conferences. The revived organization has held nine international congresses.

The International Socialist Bureau, with headquarters at Brussels, was established in 1900, and is the permanent organization of the national delegates. The so-called international secretaries have met annually or more frequently since 1904. The executive committee is composed of Belgian socialists.

Both industrial and political reforms are on the program of the Internationale. The resolutions of the 1910 Congress may be taken as typical of its demands of this international socialist movement.

- (1) A maximum workday of eight hours.
- (2) Prohibition of work of children under fourteen years.
- (3) Prohibition of night work except when necessary.
- (4) Uninterrupted rest of thirty-six hours once a week as a minimum for all workers.
- (5) Unrestricted right of free combination and association.
- (6) Inspection of working conditions by authorized agencies upon which labor is represented.

In the political field the Congress has demanded ultimate complete disarmament and the abolition of secret diplomacy.

INTERNATIONAL TRADE UNIONISM

The international workingmen's movement has developed contemporaneously with the international socialist movement. The first general trade union congress was held in Paris in 1886, and a larger and more important one in Zurich in 1897. In 1912 about thirty trades were organized internationally, the largest

and most important being the metal workers and the miners, each of which had over a million members. In 1913 the international secretaries of these various international craft organizations met at Zurich for the first time. The respective trades or crafts had hitherto been holding their independent conferences. This joint meeting of the secretaries, or secretariats as the offices are termed, was another move in the direction of greater unity in purpose and action of the trade union movement. Principally the conference hoped to bring about a closer association between the International Trades Secretariats and the International Secretariat which represented the various trades and federations.

Purely trade union activities, as distinguished from political action, have absorbed the attention of the international craft federations. All of them have favored the eight-hour day. The miners have advocated the nationalization of mines. Transportation workers, dock laborers, and seamen advocate the nationalization of the railroads and the means of production. It has, as a whole, represented the more prudent and conservative elements of the trade-union movement.

The International Secretariat mentioned above is the central executive organ of the International Federation of Trade Unions. It was organized in 1898. Before the war twenty-nine national trade union federations were affiliated with it, together with the six federations in the States of the Commonwealth of Australia, or altogether thirty-five affiliated federations. In addition thirty-two craft federations were part of the International Federation. It claimed before the war an affiliated membership of approximately 7,500,000. Eight international conferences have been held—the last one before the war, at Zurich, and one during the war, at Berne, October 1-4, 1917.

INTERNATIONAL ASSOCIATIONS FOR LABOR

Besides the political and trade-union organizations which the workman himself has built up internationally, individuals outside the labor movement have organized various international bodies which have concerned themselves in the cause of labor reform and regulation. These are composed of economists and interested workers in the field of labor reform. Among the associations of the kind may be mentioned the International Congress on Occupa-

tional Diseases; International Association on Unemployment; Permanent International Committee on Social Insurance; International Association for the Protection of Native Labor; and the International Association for Labor Legislation. The latter is the most important. It was formed in Paris in 1900 by a group of economists who met at the time of the Paris Exposition of that date. In 1901 a permanent international labor office was organized. The office has a semi-official character as it is supported by contributions voted by the various countries represented in the association. While twenty-five countries have established national branches of the International Association only fourteen contribute to its support funds voted from the respective public treasuries. Seven conferences have been held by the association, the latest at Zurich in 1912 in which twenty-two countries participated. Various delegates' meetings have been held between sessions of the more formal conferences.

This International Association for Labor Legislation has been closely and influentially associated with the drafting and preparation of international labor conventions and treaties. It has published studies and outlined policies in such matters as the prohibition of the night work of women and children, use of the dangerous white or yellow phosphorus in match manufacturing, administration of labor laws, protection of workmen from accident and disease, weekly rest day, and hours of labor in continuous industries. The most recent action of the association was the submission in June, 1918, of a memorandum requesting the incorporation in the final peace treaty which will formally terminate the World War of a program of international labor legislation. It was proposed that the international labor office should be made the official agency for the enforcement of the international labor standards which it was hoped would become a part of the future organization of the nations.

OFFICIAL INTERNATIONAL ACTION PRIOR TO THE WAR

As the result of the activities primarily of the International Association for Labor Legislation as well as of favorable official support on the part of certain European governments, a number of international conferences were held before the war and various labor treaties were entered into between different countries. Al-

together there have been signed thirty bipartite agreements affecting twelve European countries and four non-European states or colonies. Two polypartite treaties were signed as a result of the Berne conferences of 1906. The treaties or agreements entered into by the various nations fall into three groups or classes: (1) Those affecting the movement of labor, i.e., emigration and immigration conventions; (2) those respecting equality or reciprocity of treatment of native and alien labor; and (3) those providing for uniform labor standards in the signatory countries.

The treaties, falling into that class which aim to accord to alien workmen the advantages of the labor legislation of the country to which they migrate, were, before the war twenty-seven in number, four being savings bank agreements, four social insurance conventions, and nineteen having to do with accident insurance. Thus this group of treaties covers the larger part of all international agreements. The savings bank agreements permit citizens of one country to transfer deposits without charge from the savings banks of the other country. Social and accident insurance treaties make applicable to resident alien workmen the terms of the laws of the country of their employment or grant to alien dependents of native workmen the benefits of the law of the country of their employment or grant to alien dependents of native workmen the benefits of the law of the country of the alien workman entitled to benefits under such law.

Besides the above savings banks and insurance conventions, and belonging in the class of treaties granting equality of treatment of native and alien workmen in various countries are two special treaties entered into between France and Italy and between France and Denmark. The former, ratified as of June 10, 1910, provides reciprocal protection of children under the labor and educational laws of the countries; the latter ratified August 9, 1911, subjects to arbitration every issue raised between the countries concerning their respective labor laws.

Treaties which have affected labor standards in the adhering countries have been more difficult of negotiation. In fact only two such agreements are in force, namely, those relating to the prohibition of the night work of women and of the use of white or yellow phosphorus in matches. Both of these were signed at Berne, September 26, 1906. Thirteen European countries sub-

scribed to the agreement to prohibit, with certain exceptions, the night work of women. It provided that night work in industrial employment should be prohibited for all women without distinction of age within certain exceptions. Eleven hours constitutes the necessary period of night rest including the period 10 p. m. to 5 a. m. The treaty as to the prohibition of phosphorus in manufacturing matches although originally signed by only seven countries has practically become effective throughout the world.

PROPOSALS FOR LABOR PARTICIPATION IN THE PEACE CONFERENCE

After Europe had become involved in war, discussion of the way in which voice should be given to organized labor opinion regarding the final treaty of peace centered around two proposals: (1) for a labor and socialist conference at the same time and place as the Peace Conference; (2) for labor representation in the peace delegations of each of the countries participating in the settlement.

The first proposal was made originally by the American Federation of Labor at its annual convention in 1914, and specified that the conference should be international. The Canadian Trades Union Congress and the French Confederation Generale du Travail both indorsed the American proposal after a considerable lapse of time, but other allied labor groups preferred an inter-allied instead of an international meeting. The British Trades Union Congress in 1916 voted 2 to 1 against the American motion, but in 1917 the Congress not only voted that an international conference was a necessary preliminary to peace, but in October, 1918, joined with the British Labor Party in making a formal request of the British government for permission to attend such a conference.

The principle of an inter-allied conference was indorsed by both inter-allied conferences held in London in 1918. The February conference appointed a commission to organize delegates to the conference.

The second proposal, namely, for labor representation in the various peace delegations, was first urged by the American Federation of Labor at its 1916 convention. The Berne conference of October, 1917, framed a resolution asking for the participa-

tion of trade union representatives in the consideration of social and economic questions at the Peace Conference. The Confederation Generale du Travail and the Inter-Allied Labor and Socialist Conference of February, 1918, have each voted for labor representation at the peace table. The British Labor Party and the Trades Union Congress also requested the British government to include an official representative of labor in the peace delegation. A similar request was made to the French government.

The most conspicuous definition of allied war aims by labor was furnished by the Memorandum on War Aims framed by the British Labor Party and the Trades Union Congress jointly. The war aims were originally drawn up by a subcommittee of the national executive of the Labor Party, consisting of Arthur Henderson, Ramsay MacDonald, F. W. Jowett, G. H. Roberts, George J. Wardle, and Sidney Webb. They were presented to the Inter-Allied Labor and Socialist Conference in London, August, 1917, but agreement on the terms was not reached and a standing committee was appointed to give further consideration to the memorandum. The following month the Trades Union Congress and the Labor Party joined forces in the task of bringing about a general agreement of war aims among the working classes of the allied nations. The aims were revised, and after approval by the national committees of the two bodies, were presented to Premier Lloyd George as the opinion of the organized workers of Great Britain. The memorandum was accepted by the Labor Party in conference on January 23-25, 1918, and by labor representatives of the allied nations in conference on February 20-23, 1918.

THE LABOR COMMISSION OF THE PEACE CONFERENCE

With the assembling of the Peace Conference in Paris, a Commission on International Labor Legislation was designated. Its president was Samuel W. Gompers, president of the American Federation of Labor. Among its other members were the prominent Belgian socialist, Mr. Emile Vandervelde, minister of justice in the Belgian government; Mr. George M. Barnes, former labor member of the British War Cabinet, representing England; and M. Colliard, minister of labor in the French Cabinet. The commission began its sittings early in February and issued its report on March 5, 1919.—During this period a labor and socialist

conference was also held at Berne with socialist representatives from Austria and Germany present, and an elaborate series of recommendations issued.

THE REPORT OF THE LABOR COMMISSION

The report of the Labor Commission of the Peace Conference practically constitutes a demand that an international labor charter shall be included in the peace treaty. The draft, as adopted by the commission is principally based upon the British proposals.

The commission's report demands the adherence of the powers signatory of the treaty of peace, to the Berne 1906 international convention's resolutions forbidding night work for women employed in industry, and the use of white phosphorus in match industry; it promulgates the reforms adopted at the Berne 1913 conference, and intrusts the international labor conference, provided for in the report, with the realization of a series of reforms, which briefly analyzed are as follows:

1. No children under fifteen years of age to be employed in industry;
2. Young people's employment to be subject to a number of other regulations mentioned;
3. Limitation of the working day for workers to eight hours in factories and mines;
4. Saturday half-holiday to be introduced into all countries;
5. Weekly rest of at least thirty-six hours, taken from Saturday to Monday, to be allowed;
6. All laws and orders dealing with the protection of workers to apply in general to home industries;
7. Social insurance laws shall be extended to home industries;
8. Special protection and insurance for motherhood is provided, and women are not to be employed in mines or dangerous trades;
9. Women are to receive equal pay with men for the same work;
10. An international schedule of deleterious materials, which are to be prohibited, shall be kept;
11. Railway cars of all countries must, within five years, be fitted with automatic couplers adaptable to all cars;
12. Medical inspection of persons employed in home industries is to be arranged, and inspection of dwelling houses;
13. No hindrance is to be put to the free combination and association of workers in all countries and the infringement of this rule is to be made a punishable offense;
14. Foreign workers shall have the right to wages and conditions of work

agreed to between the trade unions and employers of trade. Failing such agreements, foreign workers shall have the right to wages customary in the locality;

15. There is to be no prohibition of emigration or of immigration in a general way, this rule not to affect the right of the state to restrict immigration temporarily in a period of economic depression or for the protection of public health;
16. The state shall be free to enforce a certain standard of education;
17. Wages boards with equal representation of employers and workers shall be set up by the governments for the fixing of the legal minimum rates of wages in cases where collective agreements between the workers' trade union and employers have proved impossible;
18. Unemployment is to be provided against by the linking up of the existing labor exchanges so that information can be provided with regard to the demand and supply of labor;
19. Unemployment insurance shall be established in all countries, as well as state insurance against industrial accidents;
20. A special code of law for the protection of seamen is also to be established.

Labor departments of each state, and their industrial inspectors, shall in the first place be responsible for the establishment of these international standards, but for the more effective carrying out of the treaty and the further protection of international labor regulations, the contracting states are required to set up a permanent commission consisting equally of representatives of the states which are members of the League of Nations and the International Trade Union Federation. It shall be the duty of this commission to call yearly conferences of representatives of the contracting states for the purpose of promoting industrial labor legislation. The conference is clothed with power to adopt binding regulations within the range of its powers. The stipulation is further made that at least half of the voting members of an annual conference shall consist of the representatives of the organized workers of each country. The adoption of these proposals, as can be readily seen, would have a far-reaching effect upon the labor standards of some of the countries involved.—They would also result in more nearly equalizing international competitive conditions in industry. The provision for annual conferences with power to issue binding regulations would also add to the guarantee of their general acceptance and application.

FUNDAMENTAL INTERNATIONAL TENDENCIES

Aside from the adoption of these far-reaching international standards, the international labor situation is also characterized by certain fundamental tendencies which are even more significant.—The most revolutionary expression of this general movement is to be found in the actual attempt of the Soviet Republic in Russia to socialize or nationalize land and industry and the announced intention of the new German and Hungarian governments to adopt a modified program of the same general character.—In Great Britain the same tendency has also become manifest although in a much more conservative form.—In the United States a program of like import is being advocated and the same fundamental tendency is observable.

A PEACEFUL REVOLUTION IN ENGLAND

The course of events in England may be accepted as an index of the general tendency in industrial relations in the other great countries of the Western world. There, indeed, the determination of the workers upon real democracy, equal industrially and politically, is effecting a revolution of the system. But it is, in a remarkable sense, a peaceful revolution. Nowhere and in no period, marked by the abandonment or overthrow of established custom or vested authority, has a government or the powerful groups within its domain displayed with such emphatic success the superiority of brains over bullets in the bridging of a crisis.

To the outside world, the situation in England has been a threatening one since the beginning of the war. The signing of the armistice signalled, it seemed, the inception of civil strife, but the quality of common sense had been so widely diffused, not only among the parties to the industrial equation but also among those in whose hands rest the delegated political power, that the menace of a destructive industrial conflict has been actually made the vehicle for a national and coöperative endeavor so to reconstruct the system as to meet and go with the tide of sentiment and conviction for a drastic change. Instead of a period of fruitless sabotage and open warfare, suspending production and impoverishing the nation, the British effort has proceeded so far as to justify the statement that, in peace, the will to war has been overcome by reason and the relations of what were prospective enemies so read-

justed as to indicate that industry is at the dawn of a new day—the day of 100 per cent of possible production.

Unquestionably, the outstanding fact in the current readjustment in England is that industrial self-government has been established. Control of the lives of the industrial collectivity by absentee capitalists has given way to machinery for, if not actual exercise of, control from within by joint action of management and employer. The arbitrary authority of the exploiter has succumbed to the will of the mass for participation in the decisions. This has been accomplished, first, by the organized and enlightened desire of the workers and, second, by the readiness of government and employers to see in that desire, not a heresy to be put down by force of arms and ruinous lockouts, but a clue to an inevitable new chapter in the history of human progress.

On the other hand, an amazing switch of attitude on the part of the organized workers toward the question of production has been observed. In a comparatively short time old and almost ingrained ideas of restrictions on output have been discarded in favor of an intelligent awareness that production is the only measure of the return upon industrial effort and the indications are for a harmonious coördination of brains and brawn toward every ounce of production of which the machine is capable.

There has been a mutual change of heart among employers and workers with respect to organization. Employers, once the hated enemies of the workers in their efforts to band together, now as a rule, do not see evil in labor unionism and, indeed, express a desire to see the workers fully organized. The opposition of workers to federations of employers, once considered a piratical attempt to enslave the mass by concentrating a class, is gone. In its place is a wish to have all employers organized so that all of the workers and all of the employers may work hand in hand. This summary deliberately ignores the radical, and powerless, minority which would smash all and reconstruct a new society, for the reason that the importance of this minority, by this time, must be admitted to be inconsiderable.

At the suggestion of the government (the Whitley Commission) employers and workers are forming, above the shop and plant groups, councils, representative of both sides, to govern entire industries and, above that, industry as a whole, on the basis of

principles guaranteeing full justice to every individual, the right of every family to a fixed minimum standard of living, the right of every worker to sufficient opportunity for the pursuit of spiritual and intellectual satisfaction.

Through the machinery of an industrial parliament, all of the elements of society in England have come together in agreement upon the application of certain rights, already conceded in principle. On April 5, 1919, this Parliament, comprising 800 representatives, approved the program of its sub-committee calling for the formation of a national industrial council, universal operation of industry on the basis of a forty-eight-hour week, a universal minimum wage, maintenance of unemployed, and raising of the age of child workers.

That the manner in which the government, the employers and the constituted leaders of organized labor have collaborated during the past six months has the whole-hearted approval of the mass of workers is not to be doubted. Particularly, is this believed to be correct in view of certain developments since the signing of the armistice. All England looked for industrial strife. Qualified persons, excellent observers no longer discussed what was going to happen. They had reached the second stage and were speculating upon the forms the revolution would take. Some had predicted that the trade union officials would be torn from their places of authority and strong rebels given the mandate to lead the working-class conquest. What actually happened was that the revolution was started but never finished. As a bud too early in the spring it lived a brief day. The workers' council in Belfast mimicking the Russian development swayed to and fro and then fell dead. The revolt on the Clyde had been expected and happened and ceased to happen. Glasgow underwent a spell of frenzy. Down in London the underground railwaymen tied the city up for awhile. But the mass of the workers held aloof. Nevertheless, there came a day when affairs seemed serious. The Triple Alliance, comprising the miners, the railway workers and the transport workers, presented demands, the rejection of which, it was officially stated, meant a general strike, paralyzing and if continued long enough, starving, England. But the work of wisdom had proceeded too far. The industrial parliament had secured the faith of the nation, and there was a decidedly favor-

able reaction on the part of the miners to the action of the government in starting a searching investigation of every fact about the digging and disposition of coal. Against a quarter of a million miners who continue to work, there are now about 60,000 now on strike, and they are confined to the most radical section of "Radical Wales."

TENDENCIES IN THE UNITED STATES

As compared with the United States conditions in the past in England have been less favorable to the British worker and the British worker has, by the force of circumstances, a more deep-seated feeling of solidarity. During recent years in Great Britain education in economics has spread among the workers through a system of so-called tutorial classes, meeting one night a week. Leaders, organizers, secretaries, and committeemen have been developed in surprisingly large numbers. The workers are organized in greater proportion than the workers in the United States.

It is still the fact, however, that the outlook in the United States is for a close application of the British experience. Although the American Federation of Labor, and the old line labor leaders, have not deviated from their former fight for standards, the war has infused into the industrial life of the country a new conception of the relation of the worker to his job and to his employer, and *vice versa*. In what might be termed a bill of industrial rights, drawn up by representative labor leaders, employers and representatives of the public, acting under the name of the War Labor Conference Board during March, 1918, the government of relations between workers and employers in war industries was to be based upon certain guarantees and rights, among them concessions which had until that time been the provoking causes of innumerable strikes and disputes. The right of workers to organize without fear of loss of their jobs probably was the most significant of the clauses of the agreement. It also granted the same right to employers; established the eight-hour day as a principle of right if not actually to be applied universally; recognized and affirmed the right of every worker to a living wage—a wage sufficient to insure the subsistence of the worker and his family in health and reasonable comfort—and placed the toil of

women upon a plane of value equal to that of men by guaranteeing equal pay for equal work performed.

The War Labor Board was subsequently formed and proceeded to conciliate and arbitrate industrial controversies in accordance with these principles, and in the application of the principle of collective bargaining was forced to set up systems of bargaining which now seem to be the foundation for a general readjustment of American industrial life. In every case collective bargaining was granted as a right. Under the guidance of administrators assigned by the board, workers held shop and plant elections, chose committees from among their fellows, and these committees proceed to function as representatives of the whole group of workers in such matters as the fixing of wages, determination of hours, settlement of grievances, and conditions of employment. Under the stimulus of the action of this board, the principle of collective bargaining has been extended in an extraordinary way, and has been the occasion for the consideration and adoption of committee systems in many of the basic industries of the country.

Out of the war, and its consequent high costs of necessities, and out of the inspiration furnished by the workers of Great Britain, to say nothing of the thinking that the war has aroused in every man and woman, there has also developed in America a type of unrest that will not be allayed by the mere winning of increased wage rates, shorter hours. This fact has been made manifest in a variety of circumstances, not the least of which has been the formation of labor parties with constructive political programs in various industrial centers. Definitely, this is not significant as an indication of a labor revolt, but it is significant as an indication of a state of mind.

Above all other attempts to express the needs of the changing time in America up to date stands the program of the Roman Catholic War Council. This program, drawn by a committee of four bishops of the church, not alone encourages labor to resist wage reductions and advocates such steps as the establishment of coöperative stores to be owned by the working class, government competition with monopolies, a legal minimum wage, social insurance against illness, unemployment and old age and the taxation of child labor out of existence, but it also indorses the movement of labor to obtain a voice in the management of industry,

and, even goes so far as to declare that industry must somehow pass into the ownership of those who operate it, asserting that "the full possibilities of production will not be realized so long as a majority of the workers remain mere wage earners."

The capitalist, says the report and program, "must cultivate and strengthen within his mind the truth . . . that the laborer is a human being, not merely an instrument of production; and that the laborer's right to a decent livelihood is the first moral charge upon industry." And, further, a living wage is not necessarily the limit of the workers' just demands, in the opinion of the bishops, for "after all, a living wage is not necessarily the full measure of justice. . . . In a country as rich as ours, there are very few cases in which it is possible to prove that the worker is getting more than that to which he has a right if he were paid something in excess of this ethical minimum."

In the general tendency towards the adoption of collective bargaining in this country, however, lies the chief analogy to the English situation. Works committees will undoubtedly in time come under the control of organized labor. They will in turn be federated into district boards and into joint industrial councils covering the basic industries. These councils will in their turn be federated into a national industrial council or congress in which representatives of employers and employees will meet to discuss labor and industrial problems. As a matter of fact, at the present time a national industrial congress to consider measures of labor readjustment is being vigorously agitated.

THE SIGNIFICANT FACTOR IN THE INTERNATIONAL LABOR SITUATION

In the light of these events and tendencies the conclusion is irresistible that the great war which has just closed marks the beginning of a new and revolutionary era in its bearing upon industrial relations and conditions. The significance of the French Revolution of more than a hundred years ago was political. It marked the beginnings of political democracy. After a century's experience with political democracy the workers of the world seem to have reached the decision that political democracy without a corresponding measure of economic rights and freedom is a sham and a delusion. In one way or another, they are reach-

ing out for the means of adjustment of economic institutions to democratic ideals. They are seeking to gain this end both by a larger degree of control in the direct management of industry from within and by the coercion and direction of industry through political action. The effect by either method is towards industrial democracy. This is really the significant feature of the labor problem both nationally and internationally at the present time. The labor movement, while it is directly concerned with higher standards and better conditions, is no less indirectly striving towards the subordination of our industrial institutions to our political institutions and ideals. The international labor problem will hereafter consist in the development and adaptation to our political institutions of a system of industrial constitutionalism and judicialism. This will be brought about by the effort to realize industrial democracy.

Hours of Labor in Foreign Countries

By LEIFUR MAGNUSSON,

Bureau of Labor Statistics, United States Department of Labor

THE universal 8-hour day appears to be in slow process of realization. An age-old demand of the workers of the world, it is now one of the principal outcomes, as far as labor is concerned, of the various social revolutions breaking over Europe. The realization of an 8-hour day is the most significant evidence of determination on the part of the worker to assume a station of respect, authority, and leisure among his fellows.

That work is a means to an end, and that diversity and a leisure for the cultivation of home life, social pleasures and the higher virtues is the end of life constitute the underlying philosophy of the short hour movement. However, it is undoubtedly true that the 8-hour day is now receiving its strongest support from the idea that shortening hours will require a larger man power to sustain production. This is peculiarly a trade union doctrine, and has been pressed home at present on account of the threat of unemployment under demobilization of the vast armies.

Yet in the long run it remains true that the deepest justification for the shorter workday is not economic but cultural and social. Shorter hours mean a higher degree of education for the workers, more pleasure in the work, whatever it may be, and make possible improved housing and higher standards of living. The education of the public forum and the public press cannot be effective for that part of our population which is required to work for hire 10 and 12 hours a day. Moreover work done continuously for such hours necessarily becomes monotonous and depressing and there is need to counterbalance its untoward effects upon the human psychology by some means of recreation and pleasure.

But this again the long hours of work prevent because it is necessary that the worker should have his home near his place of work in the crowded industrial centers. Not until the laborer is assured of a shorter workday will it be possible for him wholly to live in houses of pleasant rural or suburban surroundings distantly

removed from his place of work. The hours a man works become frequently a determining factor in the character of his home and home life.

Ultimately, too, the most important test of the standard of living of a people is the hours of labor of its working forces. The continents of Asia and Africa are the countries of low standards where people live nearest the line of bare subsistence and suffer most from ruthless exploitation. These countries are also the home of the 11 and the 12-hour day.

HOURS OF LABOR IN THE PRINCIPAL INDUSTRIAL COUNTRIES

Few countries publish adequate statistics as respects the hours of work in their industries. Very few have as full data on the subject as are contained in the reports of the United States Census Bureau, the Federal Bureau of Labor Statistics and the various state bureaus of labor, factory inspection offices and industrial commissions in this country. Data on hours of labor in different industrial countries are to be had only from very diverse sources, as will appear in this compilation. The most reliable data are probably those furnished in various reports on collective agreements gotten out by the continental European countries. But the material on the whole is fragmentary, and cannot be said to be more than illustrative. The material presented here covers in general the principal manufacturing industries, and to a less extent transportation, building and construction work. Commercial and office employments are not generally represented in the information gathered.

The data have been classified by countries, first, because manufacturers are believed to be most interested in it from that point of view, and also because the material is somewhat fragmentary and does not supply information for all industries in the different countries.

The period for which the data are applicable varies very considerably. Much of it is pre-war material and thus shows normal industrial conditions. Variations in hours of labor take place slowly so pre-war conditions represent the present situation fairly well. Catastrophic changes have occurred, not during the war, but as a result of revolution. As these latter changes are reflected only in legislation they have been discussed in that section of this article.

Great Britain

The present industrial situation in Great Britain is one of extreme unrest. In no field has this unrest been more pronounced than in that of the hours of labor. The demand for shorter hours by one group of workers has been closely followed by that of another group. The *Labor Gazette* of the Ministry of Labor¹ summarizes the situation during 1918 in the statement that over 120,000 workingmen had their normal working time reduced over 450,000 hours per week. This is an average reduction of $3\frac{1}{2}$ hours per week for the workers affected. Of those affected 55,000 were employed in engineering and shipbuilding trades, 20,000 in the building trades and 11,000 in the clothing trades.

At the end of the year demands were being made for reduced hours in the largest trades in England. The textile workers, who have been working a $55\frac{1}{2}$ -hour week, have secured a 48-hour working week.² They demanded a 45-hour week. Street railway employes together with surface and tube men, by agreement, January 30, 1919, secured an 8-hour day exclusive of meal time. Motormen are not included.³ The engineering and shipbuilding trades have been on a 47-hour week since November 18, 1918.⁴ This change involves over 430,000 organized machinists and related workers.⁵ The government has conceded the basic 8-hour day to the railway office staffs which took effect February 1, 1919; the railway shopmen, in common with the machine, foundry and shipbuilding crafts, have the 47-hour week.⁶ The employers federations and the organized workers in the printing trades have concluded an agreement for a 48-hour week effective March 3, 1919.⁷ The action taken by two famous employers may also be cited here. Messrs. Cadbury Brothers (Ltd.), Bournville, who employ about 6,000 persons have agreed to reduce the working week from 48 to 44 hours,⁸ and the Ford Motor Company, of England, has granted the 40-hour week, a change from a 48-hour basis.⁹

¹ January, 1919, p. 4.

² *Consular Report*, Feb. 7, 1919.

³ *London Times*, Feb. 8, 1919.

⁴ *London Times*, Jan. 28, 1919.

⁵ *British Evening Standard*, Dec. 23, 1918.

⁶ *London Times*, Jan. 7, 1919.

⁷ *London Times*, Feb. 26, 1919.

⁸ *London Times*, March 3, 1919.

⁹ *London Times*, Dec. 24, 1918.

In the British building trades changes of importance recently occurred at a conference in Manchester, February 19, 1919,¹⁰ of the Northwestern Federation of Building Trade Employers and the National Federation of Building Trades Operatives. Under this arrangement which includes the districts of Lancashire, Cheshire, Westmorland, Cumberland, parts of North Wales and North Derbyshire, the hours worked per week are reduced from 54 to 46½ in summer and to a maximum of 44 in winter. Liverpool and Birkenhead districts anticipated the scheme in December last. Altogether about 35,000 operatives and 3,000 employers are affected by the scheme. It is more than likely, however, that similar arrangements will be made for the whole of the building trades in England.

The electrical construction industry at a first meeting of a joint industrial council for the trade at Leeds, January 22, 1919, obtained a 47-hour week, effective January 27, and with the same pay as for the 53-hour week. In general as a matter of fact, these decreases in hours have not meant any decreases in wages.

Tables 1 and 2 are presented on pp. 206 and 207, which show prevailing hours in the cabinet-working trades and in the boot and shoe industry as of October, 1914, classified by localities. Boot and shoe operatives work prevailing 52 hours a week and cabinet-workers and upholsterers average about 51 hours a week.

Among women and minors there has been a tendency to reduce hours during the war. The factory inspector reports:¹¹

The tendency to reduce hours, which has been a growing feature since the early days of the war, continues, and cases where women and young persons are employed for hours in excess of the maximum weekly limits allowed by the ordinary provisions of the Factory Acts are now rare. With a view to ascertaining the hours actually worked by women and girls in munition factories a special investigation was undertaken by Miss Squire in the Southeastern Division. Visits were paid to a number of works selected so as to give a fair sample of the munition works in the Division, and in which the total number of women and girls employed was approximately 27,000. In only 5 cases did the hours actually worked exceed 60 per week; in 32 cases they amounted to 60; in 62 cases they were between 55 and 60; in 51, between 50 and 55; in 20 between 45 and 50; and in 7 they were less than 45. At a fair proportion of these factories the hours last year exceeded 60 per week.

¹⁰ *Manchester Guardian*, Feb. 20, 1919.

¹¹ *Annual Report of the Chief Inspector of Factories and Workshops for the year 1917*; London, 1918; p. 5.

TABLE 1. HOURS OF LABOR—BOOT AND SHOE OPERATIVES, OCTOBER, 1914
(Source: Great Britain Board of Trade—*Seventeenth Abstract of Labor Statistics of the United Kingdom*; London, 1915; p. 56)

District	Weekly
England and Wales:	
London ¹	52½
Anstey ¹	52½
Barnsley.....	54
Bishop Aukland.....	48
Bristol ¹	52½
Chesterfield.....	52½
Daventry.....	52½ and 54
Derby.....	54
Heckmondwike.....	52½
Hinckley, Barwell, and Earl Shilton ¹	52½
Ipswich.....	52½
Kendal.....	49½
Kettering ¹	52½
Kingswood ¹	52½ and 53½
Leeds ¹	52½
Leicester ¹	52½
Manchester.....	54
Midsomer Norton.....	53½ and 54
Newcastle-on-Tyne ¹	52½
Northampton ¹	52½
Norwich ¹	54
Nottingham.....	54
Paulton (near Bristol).....	53
Rushdem, Higham Ferrers, and Wellingborough ¹	52 and 54
Stafford ¹	52½
Stone.....	52½
Wigston.....	52½
Wolverhampton.....	52½
Worcester.....	52
Scotland:	
Aberdeen, Arbroath, Carnoustie, and Dundee ¹	52½
Ayr.....	52½
Edinburgh.....	52½
Glasgow ¹	52½
Kilmarnock.....	52½
Maybole.....	52½
Ireland:	
Belfast.....	52½ and 54

¹ The rates and hours quoted are embodied in arbitrator's awards or in agreements between employers and workpeople, or have been fixed by local conciliation boards.

TABLE 2. HOURS OF LABOR—CABINET MAKERS, FRENCH POLISHERS, AND UPHOLSTERERS, OCTOBER, 1914

(Source: Great Britain Board of Trade—*Seventeenth Abstract of Labor Statistics of the United Kingdom*; London, 1915; p. 55)

Towns	Weekly
London.....	48 to 52½
Belfast.....	40½, 52½
Birmingham.....	54
Blackburn.....	49
Bolton.....	51
Bradford.....	51
Burnley.....	53
Dublin.....	50, 52½
Dundee.....	51
Edinburgh.....	51
Glasgow.....	51
Halifax.....	53
Huddersfield.....	51
Hull.....	53
Leeds.....	49½, 52½
Leicester.....	53
Liverpool.....	46½ to 54
Manchester.....	48
Middlesbrough.....	52, 53
Newcastle-on-Tyne.....	50
Nottingham.....	51½
Oldham.....	51
Preston.....	49½ to 53, 52
Sheffield.....	49½
Sunderland.....	50, 53
Swansea.....	54

Canada

The data as to hours of labor in Canada are so fragmentary as scarcely to deserve presentation. Such information as is obtainable tends to show that industrial Canada is passing slowly from a 10-hour to a 9-hour day. The war period has marked some changes in that direction. In 1910 the building trades were almost universally on a 10-hour basis except in some of the cities where organization was strong or scarcity of labor existed.¹² The 8 and 9-hour day prevailed more generally in the Western cities. Public works, which usually represent the highest standards in a

¹² Parliament. House of Commons. Proceedings of the special committee on Bill No. 1, an act respecting hours of work of public works. Ottawa, 1910; pp. 400-404.

country as respects hours, are still on a 9-hour day,¹³ some even on a 10-hour day.¹⁴

Contract miners in the Crow's Nest Pass were granted an 8-hour day in May, 1918, and British Columbia employers granted their lumbermen (3,000 in number) an 8-hour day about the same time. The reduction was from a 10-hour day.¹⁵

The fourteen leading garment manufacturers of Montreal on February 13 voluntarily granted their employees a 44-hour week, effective April 1. The change affects 5,000 or 6,000 garment workers of whom 40 per cent are women.¹⁶

Commonwealth of Australia

No country in the world has such uniformly short hours of labor as Australia. It is the 8-hour country and has been so for years. There is not much doubt but that this is due primarily to effective union organization and control of the government by labor. The 8-hour day is not, however, incorporated in the laws of the Australian states, except in New South Wales. (See p. 231) It has been secured by arbitration awards and collective bargaining. In 1917 the number of organized workers—which partially represents the number affected by an 8-hour day—was over 500,000. The total population is approximately five million.

The nominal full-time hours of work for adult male employes averaged 48.1 hours per week in December, 1917; and for adult female workers 48.8. These figures are derived from data covering all industrial groups except agriculture and shipping. Each group is given importance according to the number affected by each specified nominal full-time hours. The longer hours of women workers is notable, and is due to the fact that a relatively larger number are in lower paid and sweated trades, protected, however, by minimum wage boards. More women, too, are in the commercial occupations, stores and offices, where hours are uniformly longer than in the factories. The longest hours prevail in transportation and in domestic service for both male and female employes.

The two tables which follow show weighted average nominal

¹³ Canada. *Labor Gazette*. Feb., 1918, p. 141; Sept., 1918, p. 752.

¹⁴ *Idem*. Feb., 1918, p. 142.

¹⁵ *Idem*. May, 1918, pp. 368, 369.

¹⁶ *Idem*. March 1919, p. 339.

full-time hours of labor per week of adult workers in the principal industries of Australia, classified first by states and second by industry groups.

TABLE 8. WEIGHTED AVERAGE NOMINAL FULL-TIME HOURS OF WORK PER WEEK OF ADULT WORKERS IN THE PRINCIPAL INDUSTRIES OF AUSTRALIA (EXCLUSIVE OF SHIPPING AND AGRICULTURE)

(Source: Commonwealth Bureau of Census and Statistics, Labor and Industrial Branch; Report No. 8, 1918; pp. 76, 77)

MALE					
States	1914 (April 30)	1914 (Dec. 31)	1915 (Dec. 31)	1916 (Dec. 31)	1917 (Dec. 31)
New South Wales.....	49.4	49.4	49.3	48.5	48.4
Victoria.....	48.8	48.7	48.5	48.2	48.1
Queensland.....	48.8	48.6	48.6	48.3	47.2
South Australia.....	48.6	48.6	48.5	48.1	47.8
Western Australia.....	47.8	48.2	48.1	48.1	48.1
Tasmania.....	48.6	48.6	48.6	48.6	48.5
Commonwealth	48.9	48.9	48.8	48.3	48.1
FEMALE					
New South Wales.....	49.3	49.3	49.5	49.4	49.0
Victoria.....	48.5	48.5	48.5	48.4	48.3
Queensland.....	49.3	49.8	49.8	49.9	49.0
South Australia.....	49.3	49.3	49.4	49.0	48.7
Western Australia.....	48.7	49.4	49.9	49.1	48.8
Tasmania.....	50.8	50.8	50.1	49.8	49.8
Commonwealth	49.1	49.1	49.1	49.0	48.7

TABLE 4. WEIGHTED AVERAGE NOMINAL WEEKLY FULL-TIME HOURS OF LABOR FOR DIFFERENT INDUSTRY GROUPS IN THE SIX AUSTRALIAN CAPITAL CITIES, DECEMBER 31, 1917

(Source: Commonwealth Bureau of Census and Statistics, Labor and Industrial Branch; Report No. 8, 1918; pp. 76-77)

MALES							
Industry group	Nominal weekly full-time hours of labor in—						
	Sydney, N.S.W.	Melbourne, Victoria	Brisbane, Queensland	Adelaide, South Australia	Perth, Western Australia	Hobart, Tasmania	Average, six cities
Wood, furniture, etc.	48.0	48.1	46.2	47.9	48.0	48.0	47.8
Engineering, metal works. . .	48.0	48.0	45.7	48.0	48.0	48.0	47.8
Food, drinks, etc.	48.6	48.5	47.7	48.4	49.9	49.3	48.5
Clothing, boots, etc.	47.8	48.0	47.3	48.0	48.0	48.0	47.9
Book etc., printing	46.7	45.9	45.3	47.6	45.6	46.0	46.3
Other manufacturing	48.0	48.1	46.9	48.1	48.1	48.2	48.0
Building	47.3	44.3	44.0	45.2	47.9	47.3	45.8
Mining	45.2	44.9	43.0	44.4	47.5	47.2	45.3
Railroad and street car transportation	48.3	48.2	48.8	48.5	48.5	49.8	48.4
Other land transportation . .	54.9	51.6	50.9	49.5	48.0	51.9	52.5
Domestic service, hotels, etc.	56.6	56.9	56.0	54.7	55.5	58.0	56.4
Miscellaneous	48.6	48.6	48.3	47.8	47.0	48.3	48.4
All industries combined	48.4	48.1	47.2	47.8	48.1	48.5	48.1
FEMALES							
Food, drink, etc.	48.0	48.0	48.0	48.0	48.0	48.0	48.0
Clothing, boots, etc.	47.8	48.0	47.6	48.0	48.0	46.5	47.9
All other manufacturing . .	47.2	47.9	47.4	47.5	..	48.0	47.6
Domestic service, hotels, etc.	51.0	50.5	52.5	50.7	49.6	58.0	51.1
Offices and stores	50.3	48.0	48.0	49.0	..	..	49.0
All industries combined	49.0	48.3	49.0	48.7	48.8	49.8	48.7

South Africa

The South African Economic Commission which reported early in 1914 gives no figures for hours of labor in South Africa, but contents itself with the statement that great variety exists in that respect; some very long hours prevail, "far longer than should be necessary in South Africa to find employment for the people at satisfactory wages."¹⁷

¹⁷ *Report of the Economic Commission*, Jan., 1914; Pretoria, 1914; pp. 62, 63.

CONTINENTAL EUROPEAN COUNTRIES

Austria

Trade agreement data as reported through the official labor journal of Austria furnish about the only measurably satisfactory statistics as respects prevailing hours of labor. Obviously such data show the situation as relatively favorable, organized workers being presumably better off than the wholly unorganized. Outside of roofers and plasterers in the building trades there are no 8-hour trades in Austria. Only a few are 9-hour trades, e.g., woodworking, upholstering, bookbinders, masons and helpers, building laborers, carpenters, painters and decorators. The 10-hour trades are stone, pottery and glass and clothing (more nearly 11 hours). The iron and steel and allied industries work on a nominal 57 to 58-hour week.

Two tables follow (Tables 5 and 6) covering the latest available material as respects trade union hours of labor in Austria.

TABLE 5. HOURS OF LABOR IN AUSTRIA FIXED BY COLLECTIVE AGREEMENTS, 1913

(Source: *Soziale Rundschau* hrsg. vom K. K. Arbeitsstatistischen Amt im Handelsministerium; Vienna, May-June, 1915; p. 115)

Daily hours of labor	Establishments		Employees	
	Number	Per cent	Number	Per cent
8 hours.....	156	2.0	406	0.3
Over 8 hours and under 9.....	317	4.0	2,209	1.7
9 hours.....	3,978	49.6	58,405	45.2
Over 9 hours and under 10....	1,840	23.0	46,295	35.9
10 hours.....	675	8.4	17,617	13.6
Over 10 hours.....	1,054	13.0	4,245	3.3
Total.....	8,020	100.0	129,180	100.0

TABLE 6. NORMAL HOURS OF LABOR PER DAY IN AUSTRIA, AS FIXED BY COLLECTIVE AGREEMENTS, 1913, BY INDUSTRY GROUPS

(Source: *Soziale Rundschau*; Vienna, May, June, 1916; pp. 122, 123)

Industry groups	Less than 9 hours	9 to 9½ hours	9½ to 9¾ hours	10 hours	Over 10 hours
Stone, pottery and glass.....	..	1,032	554	8,283	45
Iron and steel and allied	38	6,791	23,761	1,984	71
Woodworking.....	125	10,341	513	259	54
Leather.....	..	80	460	210	..
Textiles (weavers, principally) ..	..	..	720	466	..
Upholstering.....	..	915	..	..	..
Clothing.....	..	444	415	787	1,973
Paper and paper goods.....	..	..	118	..	..
Bookbinders.....	122	2,635	89	9	..
Food and food products:	..	..	..	..	..
Bakers.....	..	75	..	344	131
Others.....	..	1,001	174	1,105	621
Chemical.....	..	8	154	600	..
Building trades:	..	..	..	..	..
Masons and helpers .....	..	12,875	12,524	2,531	..
Masons and carpenters ..	..	..	2,460	..	..
Building laborers.....	..	15,250	520	..	..
Plasterers and stucco workers.....	500	..	56	..	..
Carpenters.....	..	2,361	1,688	874	..
Fixture men.....	..	626	..	..	..
Roofers.....	1,400	..	..	..	..
Glazers.....	..	400	..	..	..
Painters and decorators ..	..	5,467	20	94	..
Other.....	300	9	..	..	..
Commerce, transportation....	55	88	76	71	1,353
Miscellaneous.....	75	..	..	..	..
Total.....	2,615	60,398	44,302	17,617	4,248

Germany

As noted below, the German Provisional Government has enacted a general 8-hour law. At present, however, and during the war the prevailing hours of labor ranged from 9 to 10 hours per day. According to collective agreements in force on December 31, 1914, about nine-tenths of the organized workers affected (1,254,855) worked 8½ to 10 hours per day. The details are contained in the statement below:

TABLE 7. DAILY HOURS OF LABOR DURING SUMMER AND WINTER STIPULATED IN COLLECTIVE AGREEMENTS IN FORCE DECEMBER 31, 1914

(Source: *Statistisches Jahrbuch für das Deutsche Reich*, 1916; Berlin, 1916; p. 22.) From *Monthly Review of the U. S. Bureau of Labor Statistics*, Washington, January, 1917, p. 144

Daily hours of labor	Collective agreements affected		Establishments affected		Workers affected	
	Number	Per cent	Number	Per cent	Number	Per cent
Summer:						
Less than 8 hours.....	28	0.3	651	0.5	4,838	0.4
8 hours.....	262	2.8	2,567	1.9	38,430	3.1
Over 8 to 8½ hours.....	152	1.6	4,148	3.1	40,805	3.2
Over 8½ to 9 hours.....	1,581	16.9	48,546	36.7	388,344	31.0
Over 9 to 9½ hours.....	2,217	23.8	27,455	20.8	268,567	21.4
Over 9½ to 10 hours.....	4,001	42.8	38,546	29.2	466,373	37.3
Over 10 to 10½ hours.....	372	4.0	1,361	1.0	15,119	1.2
Over 10½ to 11 hours.....	347	3.7	3,665	2.8	14,229	1.1
Over 11 hours.....	384	4.1	5,321	4.0	16,160	1.3
Total.....	9,344	100.0	132,200	100.0	1,284,855	100.0
Winter:						
Less than 8 hours.....	1,020	12.0	33,920	27.0	381,458	32.3
8 hours.....	634	7.5	6,168	4.9	80,258	7.5
Over 8 to 8½ hours.....	157	1.8	3,863	3.1	37,486	3.2
Over 8½ to 9 hours.....	1,441	17.0	36,254	28.8	263,991	24.9
Over 9 to 9½ hours.....	1,933	22.8	15,429	12.3	157,957	13.4
Over 9½ to 10 hours.....	2,405	28.3	20,780	16.5	186,903	15.8
Over 10 to 10½ hours.....	270	3.2	971	.8	8,011	.7
Over 10½ to 11 hours.....	287	3.4	3,467	2.8	12,600	1.0
Over 11 hours.....	338	4.0	4,799	3.8	14,144	1.2
Total.....	8,485	100.0	125,651	100.0	1,181,608	100.0

Slight changes in hours occurred during the war. Among those industries in which decreases took place between March, 1914, and September, 1917, were the chocolate and confectionery industries with a 2 hours reduction per day; clothing and lingerie, 1 hour and 17 minutes; hemp, twine and linen mills, 40 minutes; shoe industry, 41 minutes; trimming factories, 38 minutes; woollen, 30 minutes; and the paper industry, 18 minutes. Some increases in hours have occurred: cigar factories, 48 minutes per day; iron and steel and allied industries, 28 minutes; milling industry, 26 minutes; woodworking, 19 minutes and stone quarries, 15 minutes per day.

As reported in September, 1917,¹⁸ the prevailing hours in the chocolate and confectionery industry were 7½ per day; clothing and lingerie, 7½ to 8 hours; precious metal manufacturing, 8½ hours; boot and shoe manufacturing, 8½ hours; and trimmings,

¹⁸ *Reichsarbeitsblatt*, Berlin, April, 1918. (From *Monthly Labor Review of the U. S. Bureau of Labor Statistics*, Washington, October, 1918; p. 176.)

8½ to 9 hours. The daily hours exceeded 10 in the paper industry (10½ hours) and in the milling industry over 11 hours. The daily hours were in stone quarrying 10 hours; hemp and twine mills, 9½ hours; knitting and weaving mills, 9½ hours; trimming factories, 9½ hours; clothing and lingerie, 8½ hours.

Italy

The underground miners of Italy work predominantly on an 8-hour day. Surface miners, however, work 9 and 10 hours. The data are reported for 1912 but the less complete figures for 1915 show no changes.

TABLE 8. NUMBER AND PER CENT OF SURFACE AND UNDERGROUND WORKERS WORKING SPECIFIED HOURS PER DAY

(Source: *Annuario statistico italiano*, Anno 1913; Rome [1914]; pp. 266, 267)

Hours per day	Underground workers		Surface workers		All workers combined	
	Number	Per cent	Number	Per cent	Number	Per cent
8 hours.....	13,954	93.1	..	..	13,954	49.9
9 hours.....	1,038	6.9	8,643	28.1	4,681	16.7
10 hours.....	..	..	8,777	67.8	8,777	31.4
Over 10 hours.....	..	..	535	4.1	535	1.9
Total.....	14,992	100.0	12,955	100.0	27,947	100.0

Marble quarry workers have extremely short hours of work, ranging from 6½ to 8 per day as reported for 6,960 workers in the district of Carrara in 1915.¹⁹

Data for some of the principal industries of Italy show a prevailing day of 10 hours and over.²⁰ Among these are included the iron and steel industry and the chemical industry. The textile industry shows 10½ to 11 hours per day²¹; the tobacco industry, 8 hours, which is an increase from 7 hours prevailing generally up to 1912.

In September, 1918, the trade union federation of Italy initiated

¹⁹ *Annuario statistico italiano*, 1915. Rome [1917], p. 258.

²⁰ *Idem.*, p. 259 et seq.

²¹ *Idem.*, 1913. Rome [1914], p. 270 et seq.

a concerted movement for the 8-hour day. On February 20, the iron and steel and machine trades obtained by agreement with the manufacturers the 48-hour week. The change is not to be effective until July 1 for workers in continuous processes so as to allow time for adjustment in passing from a 2-shift to a 3-shift system; for other workers the change is effective May 1.

In machine shops, shipbuilding and allied trades the hours are reduced from 60 or 55 to 48 per week. In foundries the change is from a 72-hour to a 48-hour week. It is expected to maintain production with the same number of employes on the 3-shift arrangement as on the 2-shift one. No change in earnings is to take place. The agreement affects approximately 500,000 workers.²²

In the printing trade and the woolen branch of the textile industry the workers have concluded agreements for a 48-hour week, effective in the former trade since March 17. Joint boards of employers and employes will make the necessary arrangements for the changes in such a way as to prevent reduction in output and to maintain competition with foreign countries.²³

In no instances do the changes contemplated mean any reduction in wages.

Netherlands

The effect of war-time conditions in the Netherlands has been to reduce the normal hours of labor. The mobilization of the military forces and the putting of the country on a war basis restricted some industries and caused others to expand. In the industries curtailed shortening hours and short time were methods of preventing too great unemployment. The increasing demands of the trade unions backed up by a greatly enlarged membership is at present a factor in the movement for shorter hours. The 8-hour day is the first demand of the organized workers of the Netherlands.

Underground miners now work 8 hours a day, while surface men are still on the 10-hour day. Government mines, however, adopted the 8-hour day for surface workers on April 1.²⁴ Under

²² The *Labor Gazette*, prepared and edited at the offices of the Ministry of Labor; London, 1919 (March); p. 86.

²³ *Idem.*, p. 87.

²⁴ *Idem.*, p. 86.

ground men worked $8\frac{1}{2}$ hours in 1914, and surface men 12 hours per day.²⁵

State and municipal workers in the Netherlands work on the average 10 hours per day.²⁶ A shorter Saturday is worked so that the weekly hours probably do not exceed 57 hours. However, as late as 1914, thirty-four municipalities out of fifty-eight fixed the maximum daily hours of work on public contracts at 11, five at $10\frac{1}{2}$ and sixteen at 10 hours. Three cities fixed the maximum at 12 hours per day.²⁵

No recent data are at hand showing the hours worked in the principal manufacturing industries of the Netherlands. Ordinarily they are published in the official factory inspection reports, but since 1913 considerations of expense and labor have made omission of these data advisable. Figures for 1913, however, may serve as a convenient base for judging the effect of war-time changes, and to show normal conditions.

In 1913 one-fourth of the adult male workers in Dutch factories not subject to regulation by law worked prevailingly 10 hours per day, and over one-half worked over 10 hours a day; about one-tenth worked over 12 hours, while a trifle over an equal proportion worked 9 hours and less per day. Slightly less than one-fifth worked less than 10 hours per day. No important changes in hours have occurred between 1910 and 1913.

Women and children appear to work on the whole about the same number of hours per day. A week's work, however, generally does not exceed 58.

The hours as reported, it should be observed, are those worked by a majority of the employes in any establishment. The ordinary practice of the factory is considered, and the fact that some employes work a greater or smaller number of hours per day is not taken into account. The figures are for the hours prevailing in the summer time, and hence, perhaps, tend slightly to exaggerate the length of the average yearly working day. No account is taken of the fact that a shorter Saturday is worked in some fac-

²⁵ *Jaarcijfers voor het Koninkrijk der Nederlanden, Rijk in Europa*, 1914; The Hague, 1916; p. 101.

²⁶ *Maandschrift van het Centraal Bureau voor de Statistiek*; The Hague, 1918 (August), No. 8; pp. 886, 887.

tories. This, however, will not tend to reduce the weekly hours more than 3 or 4 hours for the week.

The prevailing hours of labor for 441,120 employes in all classes of factories in the Netherlands in 1913 are summarized in the table following. The normal workday for wage-earners of both sexes is 10 hours, although over two-fifths work over 10 hours per day.

TABLE 9. PREVAILING HOURS OF LABOR IN SUMMER IN FACTORIES AND WORKSHOPS OF THE NETHERLANDS EMPLOYING 10 OR MORE PERSONS, 1913

(Source: *Centraal Verslag der Arbeidsinspectie over 1913*; p. 311)

	Number of establishments	Number of wage-earners	Per cent of wage-earners
9 hours.....	4,940	43,822	9.93
9½ ".....	5,826	58,237	13.20
10 ".....	9,382	154,274	34.98
10½ ".....	2,900	67,509	15.31
11 ".....	4,912	59,131	13.41
11½ ".....	2,158	20,181	4.57
12 ".....	3,780	22,167	5.02
Over 12 hours.....	4,148	15,799	3.59
Total.....	38,046	441,120	100.00

The next table shows the distribution of all wage-earners according to prevailing hours of work per day and by industry groups.

TABLE 10. PREVAILING DAILY HOURS OF LABOR IN THE MANUFACTURING INDUSTRIES OF THE NETHERLANDS, 1913

(Source: *Jaarcijfers voor het Koninkrijk der Nederlanden, Rijk in Europa, 1914*. The Hague, 1916, pp. 92, 93)

Industry group	Number working specified hours									Per cent working specified hours		
	9 hours	9½ hours	10 hours	10½ hours	11 hours	11½ hours	12 hours	Over 12 hours	Total	10 hours or less	Over 10 and up to and including 11 hours	Over 11 hours
Stone, pottery and glass.....	674	4,391	18,173	3,368	6,282	1,604	2,643	867	38,002	61.2	25.4	13.5
Diamond cutting, etc.....	9,005	136	56	..	16	..	..	..	9,213	99.8	.2	..
Printing, lithographing, etc.....	2,829	8,601	5,194	875	236	42	19	110	17,906	92.9	6.2	.9
Building and construction.....	914	887	2,053	1,346	2,617	905	414	258	9,394	41.0	42.2	16.8
Chemicals.....	1,278	1,971	3,670	1,915	1,509	197	819	77	11,436	60.5	29.9	9.6
Wood, cork and straw manufacturing.....	798	1,965	11,538	4,463	5,104	2,155	1,836	982	28,841	49.6	33.2	17.2
Clothing and cleaning.....	10,318	10,334	11,391	1,775	927	450	524	389	36,108	88.7	7.5	3.8
Art industries.....	41	255	244	53	63	51	22	8	737	73.3	15.7	11.0
Leather, rubber, etc.....	89	1,151	3,586	2,011	1,669	429	237	129	9,301	51.9	39.6	8.5
Mining.....	48	33	447	167	206	51	64	13	1,029	51.3	36.3	12.4
Metal industries.....	903	2,535	10,702	6,127	4,227	1,862	969	352	27,677	51.1	37.4	11.5
Machinery and tool manufacturing.....	1,586	7,480	11,149	5,707	4,781	3,602	634	502	25,441	57.0	29.6	13.4
Shipbuilding.....	653	957	10,530	4,475	5,365	1,150	1,851	1,630	26,611	45.6	37.0	17.4
Paper.....	353	1,977	4,217	2,220	503	300	423	31	10,026	65.3	27.2	7.5
Textiles:												
Flax breaking.....	1,155	951	1,143	209	32	8	41	..	3,539	91.8	6.8	1.4
Other textiles.....	1,702	2,060	20,310	21,335	8,047	2,105	1,422	493	57,474	41.9	51.1	7.0
Manufacture of gas and electricity	2,404	1,126	3,157	606	433	75	149	27	7,977	83.8	13.0	3.1
Food and food products:												
Bakeries.....	2,984	2,811	4,191	1,355	3,481	1,643	4,954	6,349	27,771	36.0	17.4	46.6
Flour and grist mills.....	258	201	1,480	621	1,297	560	1,199	471	6,087	31.9	31.5	36.7
Creameries, etc.....	1,158	627	2,279	1,149	1,139	811	1,283	858	9,304	43.7	24.6	30.7
Tobacco and cigars.....	1,921	3,624	10,076	4,231	1,326	786	369	111	22,444	69.6	24.8	5.6
Other.....	2,751	4,164	18,688	3,501	9,871	1,395	2,295	2,137	44,802	57.1	30.0	13.0
Total.....	43,822	58,237	154,274	67,509	59,131	20,181	22,167	15,799	441,120	58.1	28.7	13.3

¹ Does not include coal mining.

Some of the more recent changes which modify the information given in the above table should be noted. The extension of the Saturday half holiday has occurred in Amsterdam in the building trades and in diamond cutting, the latter being one of the important industries in the Netherlands. The diamond cutting trade is now practically an 8-hour trade. Amsterdam and other cities are adopting the 8-hour day generally, as are also various factories throughout the country. The movement for the shorter workday is in fact general throughout the Netherlands.²⁷

²⁷ *Monthly Labor Review of the U. S. Bureau of Labor Statistics*, Washington, April, 1919; p. 184.

Scandinavian Countries

These are countries of the 9½ and 10-hour day even among organized workers. Labor, it may be observed, too, is very well organized in these countries, particularly in Denmark, which in degree of organization ranks next to Australasia and Great Britain.

In Denmark the organized workers recently demanded the 8-hour day by law,²² and showed in connection with that demand that of about 255,000 organized workers in the country 60,000 or 23.5 per cent worked 9 hours or less per day; 157,000 or 61.6 per cent worked 9½ to 10 hours, and 38,000 or 14.9 per cent worked over 10 hours. This agrees roughly with more detailed figures secured by the government statistical bureau in connection with an analysis of collective agreements published annually. The data in question are set forth by industrial groups in the table following:

²² *Meddelelsesblad utgit av Arbeidernes faglige landsorganisation i Norge*; Christiania, 1918. No. 12, p. 206. (Organ of the Norwegian Federation of Labor.)

TABLE 11. HOURS OF LABOR IN THE PRINCIPAL INDUSTRIES OF DENMARK
ACCORDING TO TRADE AGREEMENTS IN FORCE IN 1915(Source: *Statistisk Aarbog*, 1917; Copenhagen, 1917; p. 159)

Industry groups	Number of wage earners	Number for whom hours reported	NUMBER						
			Number working specified hours per week						
			8 hours and under	8½ hours	9 hours	9½ hours	10 hours	Over 10 and less than 12 hours	12 hours and over
Food and food products...	20,710	19,913	289	66	6,045	5,721	7,038	707	47
Textiles.....	4,980	4,869	..	..	33	4,488	302	46	..
Clothing and cleaning....	11,526	8,661	5	150	2,284	2,525	2,877	20	800
Construction and furniture	26,721	25,435	8	..	2,188	10,013	13,060	152	8
Woodworking.....	3,420	3,241	..	30	212	2,958	41	..	..
Hides and leather products	546	546	..	..	106	371	53	..	16
Stone, pottery, glass, etc...	7,678	4,791	50	..	675	1,930	2,083	39	14
Metal industries.....	17,789	17,003	..	..	266	15,785	944	8	..
Chemical and electro-chemical.....	3,541	3,346	781	..	..	452	2,049	14	50
Paper and wood pulp.....	1,094	1,089	..	..	..	..	1,083	6	..
Printing and publishing....	5,893	5,761	2,493	388	1,588	1,292	..	..	..
Commerce, transportation, etc.....	17,040	14,842	457	80	802	1,399	10,621	553	930
All industries combined.....	120,938	109,497	4,083	714	14,199	46,934	40,157	1,545	1,865

PER CENT									
Food and food products...	..	100.0	1.5	0.3	30.4	28.7	35.3	3.6	0.2
Textiles.....	..	100.0	..	..	..	93.2	6.2	..	..
Clothing and cleaning....	..	100.0	..	1.7	26.3	29.2	33.2	..	9.2
Construction and furniture	..	100.0	..	..	8.6	39.4	51.4	..	..
Woodworking.....	..	100.0	..	.9	6.5	91.3	1.3	..	..
Hides and leather products	..	100.0	..	..	19.4	67.9	9.7	..	2.9
Stone, pottery, and glass....	..	100.0	1.0	..	14.1	40.3	43.5	..	..
Metal industries.....	..	100.0	..	..	1.6	92.8	5.6	..	..
Chemical and electro-chemical.....	..	100.0	23.3	..	..	13.5	61.2	..	1.5
Paper and wood pulp.....	..	100.0	..	..	..	..	99.4	..	..
Printing and publishing....	..	100.0	43.3	6.7	27.6	22.4	..	..	..
Commerce, transportation, etc.....	..	100.0	3.1	.5	5.4	9.4	71.6	3.7	6.3
All industries combined.....	..	100.0	3.7	.7	13.0	42.7	36.7	1.4	1.7

* Less than 1/10 of one per cent.

The average hours per week of organized workers in Norway are 52.5. This is based upon information covering 111,213 trade union workers. About one-fifth (19.2 per cent) worked 48 hours and under; nearly one-seventh (13.2 per cent) worked over 48 and under 54 hours; and approximately two-thirds (65.2 per cent) worked 54 hours per week. The remainder (2.4 per cent) worked over 54 hours. The table following (Table 12) shows

the number of workers (111,213) classified by industry group and nominal full-time hours per week.

TABLE 12. NUMBER OF WORKERS HAVING SPECIFIED NOMINAL FULL-TIME HOURS OF WORK PER WEEK IN NORWAY, NOVEMBER, 1918

(Source: *Meddelelsesblad utgit av Arbeidernes faglige landsorganisation i Norge*; Christiania, 1918, No. 12; pp. 204, 205.)

	Under 48 hours	48 hours	Over 48 and under 54 hours	54 hours	Over 54 and under 60 hours	60 hours	Total	Average hours per wk.
1. Construction work		3,207	405	859			4,471	49.4
2. Bakers and confectioners ..		1,775		125			1,900	45.4
3. Barbering and manicuring, etc. .				53	275		328	54.6
4. Mining		3,600		2,400			6,000	50.4
5. Tinmiths		65	87	284			436	52.6
6. Bookbinding		4	1,706				1,710	51.0
7. Book printing and lithography ..	275	1,035	2,650				3,960	49.7
8. Breweries and distilleries ..				671			671	54.0
9. Electro-plating and chemical plants			210	7,544			7,754	54.0
10. Match factories		1,010					1,010	48.0
11. Glass, stone, and terra cotta ..		425	241	2,989			3,655	53.3
12. Goldsmiths		814					814	45.0
13. Canning and preserving				2,252			2,252	54.0
14. Municipal work	7	4,066	460	54			4,587	48.4
15. Painters		19	240	1,780			2,039	53.6
16. Foundries and machine shops ..		145	116	22,563			22,824	53.9
17. Masons	7	196	446	1,031	55		1,735	52.7
18. Mason laborers		17	234	678	23		952	53.4
19. Furniture mfg.		249	355	1,138	53		1,795	52.7
20. Flour and grist-mills		19		75			94	52.8
21. Sewer and water pipe laying ..			14	565			579	53.9
22. Saw and planing mills; box mfg. .		150	58	4,015			4,223	53.8
23. Shipping; seamen and firemen ..				50			50	54.0
24. Hides and leather		100	63	358			521	52.5
25. Lumbering		110	25	595			730	53.1
26. Boots and shoes		110	460	2,630			3,200	53.4
27. Tailors			170	654	1,943	14	2,081	55.6
28. Slaughtering and packing		49	386	97			532	52.1
29. Blacksmiths				260			260	54.0
30. Creameries		20	234	636			890	52.8
31. Carpenters and joiners		284	583	3,161	140		4,168	53.4
32. Stone cutting				711			711	54.0
33. Textiles			352	2,707			3,059	53.9
34. Cigars and tobacco		740	890				1,630	49.1
35. Transportation		40	413	3,827	508		4,788	54.0
36. Paper and wood pulp		2,774	3,439	5,480	400		12,093	51.8
37. Woodworking			359	642			1,001	53.4
38. Miscellaneous, not specified ..		45	57	1,008			1,110	52.8
Total	280	21,068	14,653	72,492	2,697	14	111,213	52.5

Sweden may be classed as a 10-hour country; at the same time the war period has chronicled several departures from the general rule. The government itself under labor pressure made changes in hours upon its public works. By order of April 11, 1918, the government reduced the hours of labor upon its telegraph and railroad lines and water power works to 52 per week, 9 hours for the first 5 days of the week and 7 hours on Saturday. The order

took effect May 1, 1918.²⁹ The number affected is not stated, but must be considerable as the industries are among the more important ones in the country. Hours similar to the above were found to prevail in government arsenals and machine shops, as the result of an investigation in August, 1918.³⁰ Inasmuch as an 8-hour law has been enacted in Sweden to apply to all government works, conditions have been somewhat changed from those here noted.

According to consular reports, the building industry in Sweden has changed from a 57 to a 51-hour week.³¹ The change includes more particularly bricklayers, plasterers, carpenters, laborers, pile drivers, plasterers' laborers, general laborers, and cement and concrete workers.

As set forth in the official reports and collective agreements which covered 98.6 per cent of all employes under collective agreements the number and per cent of persons working specified hours per week in 1916 are shown in the two tables, following (Tables 13 and 14):

TABLE 13. NUMBER AND PER CENT OF PERSONS IN SWEDEN UNDER COLLECTIVE AGREEMENTS WORKING SPECIFIED HOURS PER WEEK, 1916

(Source: *Sociala Meddelanden utgivna av K. Socialstyrelsen*; Stockholm, 1918, No. 12; p. 1471)

Hours per week	Workers	
	Number	Per Cent
48 and less.....	4,662	4.0
49-53 hours.....	3,635	3.1
54 hours.....	11,468	9.9
55-56 hours.....	4,614	4.0
57 hours.....	27,681	23.9
58 hours.....	4,113	3.6
59 hours.....	7,543	6.5
60 hours.....	49,774	43.0
Over 60 hours.....	2,251	2.0
Total.....	115,741	100.0

²⁹ *Sociala Meddelanden utgivna av K. Socialstyrelsen*; Stockholm, 1918. No. 5; p. 622.

³⁰ *Idem.* No. 10, pp. 1087, 1088.

³¹ *Monthly Review of the U. S. Bureau of Labor Statistics*, Washington, March, 1919; p. 194.

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TABLE 14. HOURS OF LABOR (NOT INCLUDING REST PERIODS) AS FIXED BY COLLECTIVE AGREEMENTS IN SWEDEN, 1916, BY OCCUPATIONS

(Source: *Kollektivavtal i Sverige år 1916* by K. Socialstyrelsen; Stockholm, 1918; pp. 12-15)

	Number of collective agreements	Number of employees affected	Number of employees for whom hours reported	Number of employees whose specified hours per week are—							
				48 hours and under	49 to 53 hours	54 hours	55 to 56 hours	57 hours	58 to 59 hours	60 hours	Over 60 hours
I. Mining and metals:											
Mining	17	3,379	2,397	3,397							
Iron and steel works	3	131	131					72	58		
Iron and steel products	15	246	246				209	37			
Timbering	137	699	699				179	399	23		
Machine shops	122	3,618	3,618			397	199	3022			
Implement and tools	1	249	249		249						
Other	34	140	140				140				
II. Stone, glass and pottery:											
Stone cutting	39	357	357					381	54	22	
Glass manufacturing	20	2,060	2,060	1,285				671	104		
Ceramics	1	205	205					205			
Other	3	129	129					50	64	15	
III. Lumber and woodworking:											
Timber floating	4	1,205	1,055						355	700	
Saw and planing mills	32	5,430	5,335				299	1,360	3,786		
Lumber yards	8	587	587		18		54	110	405		
Carpenter and cabinet shops	96	2,152	2,152			44	1,101	963	22		
Coppers	5	110	110						110		
Coat cutting	6	352	352		129	223					
Other	11	90	90				22	61		7	
IV. Paper and related trades:											
Paper and wood pulp	29	6,364	6,364					136	2,321	2,667	661
Bookbinding	57	1,863	1,863			1,863					
V. Food products:											
Flour and grist mills	5	269	269					135	65	69	
Bakeries and confectionaries	563	2,920	2,905	33		41	107	145	2,442	66	71
Sugar refining	24	7,482	7,482							7,482	
Breweries	22	1,800	1,821						20	1,801	
Tobacco factories	1	482	482					482			
Oleomargarine factories	3	261	261				24	157	60		
Slaughtering and meat packing	64	356	356				10	220	79	46	
Other	4	94	94					21	25	36	
VI. Textiles and clothing:											
Spinning and weaving	108	23,000	23,000							23,000	
Tailoring	371	2,447	2,437					21		2,406	
Other	3	196	66					66			
VII. Leather and related trades:											
Shoe and shoe manufacturing	38	6,320	6,320			6,320					
Shoe repair shops, etc.	146	365	301			21		150	30		
Saddlery and upholstery	205	575	568		203	171	171	12	10		
Other	1	14	14					14			
VIII. Chemical industry:											
Fertilizer factories	4	337	337					343		90	3
Charcoal burning	1	200	200						200		
Tannin acid works	1	125	125					125			
Explosives	3	376	376				296			90	
Carbide manufacturing	1	180	180					180			
Match manufacturing	6	2,083	2,083				640	1,643			
Other	3	90	90					90			
IX. Building trades:											
Masons		2,598	2,598					2,615			
Woodworkers		6,349	6,349					355	5,994		
Building laborers		5,863	5,863					537	5,026		
Painters	573	5,034	4,994		3,026	163	220	1,576	39		
Glaziers	57	200	200					200			
Plumbers	24	1,165	1,165			740		425			
Electricians	9	461	461					461			
Road and water power work	6	321	291					271	20		
Other	29	119	119			10		99		10	
X. Municipal and public works:											
Office and store clerks	10	239	239					65		174	
Other	16	234	234				79	15	25	112	
XI. Transportation:											
Trucking and hauling	99	1,437	1,437					180		30	1,267
Loading and unloading	12	1,062	1,062			300		110	230	222	
Street railways	2	1,247	1,247			1,145				102	
Railroad	108	11,417	11,417							11,417	
Other	47	816	134	67		30					77
Total											
	4,302	117,612	115,741	4,062	2,635	11,468	4,614	27,081	11,636	69,776	2,351

Argentine Republic

The city of Buenos Aires is rather remarkable as respects the short hours enjoyed by the workers in its industries. The government statistical office reports the average daily hours of labor as less than 9, i.e., 8 hours and 56 minutes; the maximum is reported as 9 hours and 50 minutes prevailing among employes in commercial houses, stores, etc., the minimum as 8 hours and 11 minutes in printing and publishing. These facts are based on data concerning 312,997 employes for the year 1916.

The proportion working specified hours per day in 1914 were as follows:

8 hours	46.6 per cent
8½ "	27.1 " "
9 "	19.1 " "
9½ "	6.6 " "
10 "	0.6 " "
Total,	100.0 " "

Comparative data for the years 1914, 1915 and 1916 for the different industry groups show the following average hours of work in each:

TABLE 15. AVERAGE DAILY HOURS OF LABOR IN THE DIFFERENT INDUSTRY GROUPS OF BUENOS AIRES, 1914-1916

(Source: Argentine Republic; *Boletín del Departamento del Trabajo*, January, 1918; pp. 17, 18, 85)

Industry group	1914		1915		1916	
	Hours	Minutes	Hours	Minutes	Hours	Minutes
Food and food products . . .	9	16	9	28	9	16
Printing and publishing . . .	8	25	8	29	8	11
Transportation	9	5	8	50	8	53
Commerce and trading	9	40	9	41	9	50
Construction, building, etc. .	8	29	8	47	8	37
Iron and steel, etc.	8	31	8	35	8	37
Woodworking	8	32	8	34	8	43
Clothing	8	40	8	52	8	50
Hides and leather	8	35	8	33	8	33
Miscellaneous	9	1	9	5	9	14
Total	8	42	8	58	8	56

LEGISLATION AFFECTING HOURS OF LABOR

Any attempt to present the situation as respects hours of labor as disclosed by the legislation of many countries of divergent economic conditions within the compass of a brief article must necessarily be somewhat sketchy. The following survey is by no means exhaustive but it is believed to be fairly comprehensive.

Regulation of the hours of labor by law has affected three groups of workers in the historical order named: (1) women and children; (2) adult males in dangerous and unhealthful occupations, and (3) all workers regardless of age and sex or the nature of the employment. The first and second class of laws have followed the industrial revolution as it has occurred in different countries, although those of the second class applying to adult male workers have lagged somewhat behind those applying to women and children. Hours of labor laws affecting all groups of workers and kinds of occupations are very recent. They have been accepted in Europe as fast as the antagonism of business interests to them could be overcome, while in the United States such laws have met not only opposition from employers, but also constitutional objections. This latter, however, has been definitely settled by the Supreme Court at least as far as fixing a 10-hour day is concerned.²² The reasonableness of an 8-hour day, however, has yet to be settled.

Laws Affecting Women and Children

The requirements of education and the health of the rising generation are the basis of these laws. The laws generally confine themselves to the employment of women and children in factories, stores and offices, but not necessarily to all employment, as for example, in agriculture, and in the very large class of family shops and stores. The hours of labor are controlled in two ways: first by the requirement of a minimum rest period at night and during the progress of the work in the daytime, and by a maximum length for the actual working day. The situation as respects hours of labor of children in industry in the various countries is as follows:²³

²² *Bunting v. Oregon*, 37 Sup. Ct., 435.

²³ Bauer, Stephen. *Arbeiterschutz und Völkergemeinschaft*; Zurich, 1918; pp. 58, 59. (Translation in *Bulletin No. 254 of the U. S. Bureau of Labor Statistics*, Washington: Labor Legislation and the Society of Nations.)

TABLE 16. AGE LIMIT FOR ADMISSION TO WORK, LEGAL PERIOD OF NIGHT REST, AND MAXIMUM HOURS OF LABOR, FOR YOUNG PERSONS IN SPECIFIED EUROPEAN COUNTRIES BEFORE THE OUTBREAK OF THE WAR

Country	Age limit (years)	Night rest (hours)	Maximum hours of labor
Denmark	18	10	10
France	18	8	10
Great Britain	18	12	10
Finland	18	10	12
Greece	18	11	10
Norway	18	11	10
Serbia	18	9	10
Sweden	18	11	10
Switzerland	18	11	10
Netherlands	17	11	10
Germany	16	11	10
Austria	16	9	11
Bosnia	16	9	11
Belgium	16	8	12
Luxemburg	16	8	10
Portugal	16	8	10
Russia	15	8	8
Italy	15	8	11
Bulgaria	15	9	8
Rumania	15	8	8

¹ 54 hours per week.

² In winter, 10 hours.

These standards are not absolute but are subject to exceptions under certain conditions, as for instance in case of accidents arising from act of Providence and where preservation of perishable products is necessary.

The prohibition of night work of adult women workers has been the subject of an international agreement (September, 1906) to which 14 countries are parties, namely: Austria, Belgium, Denmark, France, Germany, Great Britain, Hungary, Italy, Luxemburg, Netherlands, Portugal, Spain, Sweden and Switzerland. Under the agreement the maximum night rest of 11 hours is required. For most countries these standards had been established nationally previous to the international agreement, and amounted to little more than the acceptance of a symbol, or the making of an empty gesture. Other countries, however, subsequently registered their approval of the standards set up.

The results of the night work agreement are contained in the following tabular statement:⁴

TABLE 17. LEGAL NIGHT REST FOR WOMEN BEFORE AND AFTER THE ENFORCEMENT OF THE AGREEMENT

	Legal night rest for women	
	Before agreement	After agreement
German Empire.....	9 hours	11 hours
Austria.....	9 hours	11 hours
Hungary.....	No regulation	11 hours
Bosnia.....	No regulation	9 hours
Belgium.....	No regulation	11 hours
Denmark.....	No regulation	No regulation
Spain.....	No regulation	11 hours
France.....	8 hours	11 hours
Great Britain.....	12 hours	12 hours
Italy.....	8 hours, summer; 10 hours, winter	11 hours
Luxemburg.....	No regulation	11 hours
Portugal.....	No regulation	11 hours
Netherlands.....	10 hours	11 hours
Norway.....	No regulation	9 hours
Russia.....	8 hours (in textile factories)	8 hours
Finland.....	No regulation	No regulation (8-hour shift)
Sweden.....	No regulation	11 hours
Switzerland.....	9 hours, summer; 10 hours, winter	11 hours
Greece.....	No regulation	11 hours
Lichtenstein.....	No regulation	9 hours
Bulgaria.....	No regulation	9 hours, summer; 12 hours, winter
Serbia.....	No regulation	9 hours, summer; 10 hours, winter
Rumania.....	No regulation	No regulation

Certain colonies of the European powers observe the standards in question. Algiers, Tunis, Trinidad, Tobago, Ceylon, Gold Coast, North Nigeria, and Uganda have acceded to the convention. The 11-hour limit for the night rest is exceeded by Ontario, New South Wales, Western Australia, and New Zealand, the range being from 12 to 14 hours as a minimum.

⁴ Bauer, Stephen. *Op. cit.*, p. 68.

The 10-hour working day for women as a maximum was in force before the war, in Germany, Norway, Switzerland, Greece, Portugal, England, France, Bulgaria and Serbia. It is 11 hours in Austria and Hungary, Bosnia, Lichtenstein, Spain (textile mills, 10 hours or 60 a week) and Rumania; $11\frac{1}{2}$ hours in Russia; 12 in Italy and Finland; 10 hours in Sweden and Denmark up to age 18, and in Luxemburg up to age 16; 12 hours in Belgium to age 16.

Saturday work is limited in Great Britain, Germany, Netherlands, Switzerland, Norway and Serbia.

The weekly hours of work for women in factories as fixed by law in various European countries are as follows:

52½ hours	Great Britain (textile mills).
58 "	Netherlands, Serbia.
59 "	Switzerland.
60 "	Great Britain (non-textile factories); Spain (textile mills), France, Bulgaria, Greece, Portugal.
66 "	Austria, Bosnia, Hungary, Lichtenstein, Rumania, Spain (non-textile factories).
67½ "	Russia.
72 "	Belgium, Italy, Luxemburg.

In *Canada*, Quebec, Ontario, and New Brunswick have retained the 10-hour day for women. Manitoba and Nova Scotia have a 9-hour day, and British Columbia an 8-hour day. Saskatchewan has the shortest working week for women, namely 45 hours.

Argentina has introduced the 10-hour working day for Buenos Aires (in winter 8 hours) and Ecuador, Uruguay, Finland, Norway and Germany have an 8-hour day which applies to all occupations.

In Australia the 48-hour week prevails in the six states of the Federal Union; the working day can be at the most 10 hours in Victoria and in Western Australia $8\frac{3}{4}$ hours. The 45-hour week (or the $8\frac{1}{4}$ hour day) prevails in New Zealand.

In Africa the same regulation of working hours applies to women as to men. The 12-hour day is in force in Japan, as well as in the textile factories of the East Indies; it is 11 hours in other East Indian factories. An 9-hour day for women up to 18 years has been introduced in the tea plantations in Assam.

Regulations of Hours of Adult Males

Legislation limiting the hours of adult male workers falls into two classes, the first affecting persons in occupations of every class and that affecting only those in dangerous and unhealthful trades. The latter class comprises the earliest legislation restricting the hours of labor. In the days of the guilds in Germany a working day of six hours was observed in underground mines so that the present prevailing hours actually mark a decline in some respects. Today the mines of England are on the verge of securing the 6-hour day; and Lord Leverhulme of that country looks to the 6-hour day in industry as perhaps a not distant realization.

Of the hazardous and unhealthful occupations mining is significant for the relatively short hours of labor observed by its workers. It has been estimated that three-fourths of the world's coal supply is at present produced on the 8-hour day.²² The length of the underground shift in mining in various European countries is as follows:

Bosnia	12 hours
Russia	11½ "
Rumania.....	10 "
Sweden	10 "
Austria	9 "
Belgium (coal mines)	8½ "
Spain.....	8½ "
Netherlands.....	8½ "
Australia (New South Wales)	8 "
France (coal mines)	8 "
Great Britain (coal mines).....	8 "

The statutory hours are 48 per week in Germany, Greece, Norway, Finland. No regulations are found in Hungary, Bulgaria, Italy, Luxemburg and Servia, all of which have mines. The hours as stated above mean something a trifle different in each country according to the definition of a shift. The intention, however, is generally to prevent the stay of the miner underground beyond the stated limits. The British coal mines regulation act of 1908 provided apparently for an 8-hour shift from bank to bank, but exceptions allowed make the law practically a 9 or 9½ hour law, hence the demand on the part of the miners to change the wording

²² Bauer, Stephen. *Der Weg zum Achtstundentag*; Zurich, 1919; p. 11.

from "eight" to "six" and thereby to establish a real 8-hour day underground. The miners, however, compromised their demand and accepted a 7-hour day as had been promised by the government.

Hours of Labor in General Employments

Some of the general factory laws of the European countries prescribe within certain exceptions prevailing hours of work for factory employes. Most factory laws do not, however, regulate the hours of work of adult males. The Swiss factory law of June 18, 1914, reduced the working day in factories from 11 to 10 hours. Nine hours may be worked on Saturday. Overtime in excess of 2 hours a day nor for more than 80 days a year is prohibited. The law may not be evaded by giving out work at home. Spain, in 1913, also legalized the 10-hour day or 60 hours a week. France limits the workday to a maximum of 12 hours; but ministerial and other regulations may prescribe fewer hours. For example, regulations have limited the hours of labor of engineers and firemen on railroads to 10 a day. The longest hours of consecutive work may not exceed 17. In Austria the factory day is fixed at 11 hours, but with numerous and important exceptions. Denmark, Italy and Sweden do not regulate hours of adult males; the matter is left to private contract.

Eight Hour Laws

The 8-hour laws are of special interest. They are in most cases the result of revolutions or war-time conditions. While they are not all in warring countries, the war psychology, the war-time restlessness of labor, lies back of them, however remote from the actual scene of operations the countries affected may be.

Immediately following the Russian Revolution in March, 1917, the Finnish Senate ordered the 8-hour day in state railroad shops and the government printing office. On November 27, 1917, a general 8-hour day was legalized after extensive strikes in the metal industry and after it had been agitated and secured in several other trades by collective agreement.³⁶ As amended August 4, 1918, it provides for a general 8-hour day in all trades and occupations, allows overtime not exceeding 2 hours a day, or 24 hours in 2 weeks, and 200 hours a year; but an additional

³⁶ *Sociala Meddelander utgivna av K. Socialstryrelsen*, Stockholm, 1917, No. 6, pp. 802, 803; *Finlands Forfattningssamling*, 1917, No. 103, 1918, No. 94.

150 hours a year maximum may be allowed by special order of the factory inspectors.

Two other European countries now have a universal 8-hour day,—Norway and Germany having acceded to the demands of their workers, the former in a temporary act of August, 1918, and the latter by an order of the Provisional Government November 12, 1918. The Norwegian act restricts the working day in its factories to 8½ hours and the week to 48 hours. The act repeals the 9-hour day or the 54-hour week contained in the factory act of 1915. It remains in force during the war period and 12 months after the peace declaration.¹⁷

The order of the German Government¹⁸ applies to workers in all industrial establishments, inclusive of mining, Federal, state and municipal works, and "in agricultural subsidiary establishments of an industrial nature." This latter phrase probably includes, for instance, such operations as those of creameries or dairies or cheese factories run as part of the operations of large landed estates.

The order provides for a net 8-hour day, i.e., one exclusive of rest periods, but permits that a shorter Saturday or day preceding a holiday may be observed by making up the necessary hours during the other working days. General exceptions to the daily working hours are to be allowed in railroading and the various services of communication; but these exceptions are to be arranged by agreements between the parties or by governmental order in default of such agreement. Temporary emergency work is exempt from the law.

Work of a continuous nature and where an immediate shortage of labor exists may secure special exemption after consultation with both employers and workers. Sixteen hours is the maximum allowed at shift changes in continuous operations, to be followed by an uninterrupted rest of 24 hours for those in the overlapping shift.

While the 48-hour week is the rule by collective bargaining in Australia, one of the states in 1916 enacted an 8-hour law.¹⁹ In

¹⁷ *Sociale meddelelser udgit av Departementet for Sociale Saker, Handel, Industri og Fiskeri*; Christiania, 1918, No. 4; p. 187.

¹⁸ *Reichsarbeitsblatt*; Berlin, 1918 (December); p. 880.

¹⁹ *New South Wales Official Year Book*, 1917, pp. 537, 538.

practice in New South Wales the 8-hour principle is applied in 5 working days of $8\frac{3}{4}$ hours each and $4\frac{1}{4}$ hours on Saturday. The 8-hour act of 1916 limits work underground in coal mines to 96 hours in 14 days for firemen, examiners, etc.; to 48 hours in 6 days for men handling coal; and to 8 hours during the 24 for all others. In metalliferous mines, above ground work, it is limited to 8 hours in the 24, or 88 hours in 14 days, and in underground shifts 6 hours if during 4 hours the temperature is above 81 degrees Fahrenheit. All other industries are to operate 8 hours per day for 6 days a week, 48 per week or 96 hours in 14 days. Overtime is not prohibited, but must be paid for at prescribed rates. However, it may be prohibited by agreement or by an award of an industrial court.

The factory act of 1908 of New Zealand requires $8\frac{3}{4}$ hours work per day and 48 hours per week with restricted overtime to be paid for additionally but at regular rates. It is interesting to note that those doing work in their own establishments must observe these hours. This is aimed at the Chinese laundrymen to prevent unfair competition on their part with local labor. The usual method of all laws, it may be observed, is to lower standards to prevent competition of backward and low standard labor; here is an instance of raising standards to prevent competition.

Two Spanish American states have enacted general 8-hour laws, namely, Ecuador and Uruguay.⁴⁰ The Uruguayan law of November 17, 1915, makes the 8-hour day applicable to any factory, workshop, shipyard, stoneyard, harbor works, shipping and all commercial and industrial undertakings, including also public works. While overtime is permitted, the hours of work may not exceed 48 per week. The law of Ecuador, September 4, 1916, while very similar in its scope and application, is apparently less drastic in its overtime provisions, and does not apparently restrict the amount except in so far as extra compensation is required to be paid.

⁴⁰ *Monthly Review of the U. S. Bureau of Labor Statistics*; Washington, April, 1916; Jan., 1917.

Recent Phases of Competition in International Trade

By WILLIAM B. COLVER¹

Chairman, Federal Trade Commission

ALTERED competitive conditions in international trade resulting from the world war have completely disarranged the world's commercial chessboard. A regrouping is taking place whereby the relative positions and spheres of influence of the leading commercial countries are being vitally affected.

Prior to the war Great Britain, Germany, the United States and France, in the order named, divided the lion's share of the world's foreign trade. Now the way seems open for the United States to take first place. From a debtor it has become the leading creditor nation of the world.

Japan's foreign trade exhibits a remarkable growth. In 1913 it had a balance of trade of imports over exports of approximately \$48,485,715. In 1917 the export trade of Japan showed a balance of \$283,606,295 over imports.

Of the neutral countries of Europe, Sweden, Denmark and Spain show a great proportionate growth in their foreign trade during the war, as do also Argentine, Brazil and Chile. On the other hand Great Britain and France have suffered heavy losses in the money value of their foreign trade. So, too, Russia, the Netherlands and Norway.

This universal dislocation of commerce and trade, involving loss of trade on the one hand and acquisition of new markets on the other, has greatly stimulated activity in foreign trade. Efforts to regain what has been lost or is being endangered by new competitors, and to hold and expand what has been newly acquired, surpass all precedents in scope, in keenness of rivalry and in systematic methods of endeavor. The attention of business men has been thoroughly aroused as to the future possibilities of foreign markets, not as dumping grounds for temporary over-production, but

¹ Acknowledgment is made to the patient and helpful assistance of Dr. William Notz of the Federal Trade Commission staff, in the preparation of this paper.

as permanent fields for enterprise. Individual and collective efforts on the part of private concerns to establish and foster trade relations with foreign markets are being backed up by government aid and coöperation. A world-wide drive for foreign trade has begun.

GREAT BRITAIN

The most comprehensive preparations for promoting foreign trade made during the war by any of the leading industrial countries of the world have been made by Great Britain. Her over-sea trade machinery has undergone a complete over-hauling. Shortly after the outbreak of the war Sir Edward Grey voiced the view generally prevailing in British official circles as well as among business men and others interested in commerce and industry as follows:

If we want to capture trade in neutral markets we must see to it that we have high production instead of low. The other want of ours is industrial organization. Without this we cannot successfully compete with American and German industries, which, owing to their own superior method, work en masse. We are far too individualistic as a rule. We have to combine to hold our own.

This plea for concerted effort for solidarity of trade interests at home and for coöperation in meeting foreign competition found a responsive audience. Henceforth economic unification of the different industries of the United Kingdom, and on a larger scale economic nationalism of the business interests of the whole Empire became the watchword, and gave a new direction to the commercial policy of the nation.

The Committee on Commerical and Industrial Policy after the War

In 1916 the Prime Minister appointed a Committee on Commercial and Industrial Policy after the War which was "to consider the commercial and industrial policy to be adopted after the war." Among its terms of reference, this committee was to consider "what steps should be taken to recover home and foreign trade lost during the war, and to secure new markets." In its final report presented to Parliament in 1918 the committee points out, among other things:

That notwithstanding the strength of the United Kingdom's economic position, there is a widespread feeling that a reconsideration of our industrial and trade

organization has become necessary in consequence of the increasing intensity of foreign competition, based largely upon a system of combination in respect of production and distribution which has hitherto made comparatively little progress in the United Kingdom. While there is a danger that consolidation and combination not only may tend to diminish individual initiative and enterprise to which the progress of British manufacture and industry has been largely due, but also may be carried to a point at which it becomes inimical to the general interests of the country, we agree generally with the opinion that in some important directions the individualistic methods hitherto mainly adopted should be supplemented or entirely replaced by coöperation and coördination in respect of (1) the securing of supplies of materials, (2) production (in which we include standardization and scientific and industrial research), and (3) marketing. . . . We recognize that the formation of organizations for marketing in respect of overseas trade will stimulate the creation of combinations for the control of domestic sales. We believe, however, that such development is not only desirable in some cases, but practically inevitable under modern conditions, and that the attitude of public opinion, of local authorities and the state, which has hitherto been antagonistic, must be modified. We consider, moreover, that, so far from being adverse to the interests of labor, combinations of employers are on the whole beneficial to the workers in the trade affected in respect of rates of wages, steadiness of employment and other matters.

The policy advocated by the committee has been actively promoted by the British Board of Trade during the past two years.

Fostering "Key" Industries

Two further points emphasized by the Committee on Commercial and Industrial Policy after the War relate to certain essential industries. These so-called "key" or "pivotal" industries comprise certain special commodities which are considered essential to national safety, as being absolutely indispensable to important British industries, and which were supplied before the war entirely or mainly from present enemy sources under present enemy control. In addition to synthetic dyes and spelter, they include tungsten, magnetos, optical and chemical glass, hosiery needles, thorium nitrate, limit and screw gauges, and certain drugs.

Regarding these "key" industries the committee recommended "that they should be now maintained in Great Britain at all hazards and at any expense," and that "failing efficient and adequate output, the government should itself undertake the manufacture of such articles as may be essential for national safety." The committee recommended the establishment of a permanent board to be known as "the Special Industries Board" charged

with the duty of watching the course of industrial development and of framing from time to time detailed schemes for the promotion of "key" industries. This board is to be represented in Parliament by the head of the respective department which is entrusted with the care of the commercial and manufacturing interests of the country.

Already action has been taken by the British government to foster certain "key" industries, particularly that of artificial dyestuffs. Under a special law the British government has granted large subsidies to British dyes and other dyestuff manufacturing plants. To strengthen further the industry, a scheme for amalgamating the leading British concerns manufacturing coal tar dyes has had the active backing of the Board of Trade and is now being consummated. The new concern, which will include British Dyes, Ltd., and Levinstein, Ltd., will convert the British dyestuff industry into one large national industrial unit, subsidized by the government, and powerful enough to cope with any foreign competition. On February 24, 1919, the Board of Trade issued an order prohibiting the import of dyestuffs except by license. A Trade and Licensing Committee, composed of an equal number of representatives of the dye manufacturing and dye using industries, will administer the order.

The British Board of Trade Reorganized

The inspiration and center of the whole movement for British trade expansion is the British Board of Trade. From there ambitious plans for reconstructing the domestic and foreign trade machinery of Great Britain have emanated, and have been put into execution. The board itself has undergone a complete reconstruction during the war. As constituted under the new scheme of organization the Board of Trade consists of two main departments—The Department of Commerce and Industry, and the Department of Public Service Administration.

The Department of Commerce and Industry is mainly concerned with the development of trade, with vigilance, with suggestion, with information and with the duty of thinking out and assisting national commercial and industrial policy. It is subdivided into the following divisions: (a) Commercial Relations and Treaties, (b) Overseas Trade Development and Intelligence,

(c) Industries and Manufactures, (d) Industrial Property, (e) Industrial Power and Transport, (f) Statistics.

The Department of Public Service Administration is primarily engaged in the exercise of statutory and other administrative functions of a permanent nature with regard to marine affairs, public utilities and harbors, railways, companies and bankruptcy.

Trade Association

Side by side with the various activities of the British Government in its drive for promoting foreign trade, some of the preparations made by British trade associations for developing export trade merit special attention. The Federation of British Industries at its last annual general meeting in October, 1918, had a membership of 951 in which number 164 trade associations were included. The federation represents 16,000 manufacturing companies with a total capital of \$20,000,000,000.

The president of the federation in his presidential address said, among other things, that "it would add enormously to the strength of the federation and to British industry generally, if their huge membership would definitely adopt the policy of buying each others' products in preference to foreign goods." A resolution was passed:

That commissioners or representatives of the federation be appointed in each of such overseas markets as may be determined, who are to act as a center for collecting and classifying information from all parts of the market area to which the commissioner is accredited; to institute a close inquiry into the national resources of the country; to keep lists of likely men to act as agents for members; to retain a legal adviser in the country for the use of members; to encourage propaganda for British trade; to have a library for trade literature and catalogues; to give information as to the financial position of local firms; give advice on local and trade customs; to form a link with the representatives of the British government with a view to securing the assistance of the government for British manufacturers where necessary; to arrange for coöperative placing of advertisements; to create new or get in touch with existing associations of each country composed of the principal firms engaged or interested in industry; to appoint a local board of prominent business men in sympathy with British aims to advise him generally.

The British Manufacturers' Corporation is another trade organization which has recently been formed "to ensure British trade prestige in overseas markets." Its membership includes large and small manufacturers in all industries. It is to serve as an instrument for the getting of orders from overseas.

Sir Charles Mandleberg of Manchester, one of the founders of the corporation, recently said that "the aim of the corporation is to equip British manufacturers in every possible way for the coming struggle, and instruct that no manufacturing firm with hopes of increasing its export trade should be left outside this organization in the national interest, or can afford to remain outside it in its own interest. . . . " The scheme which the corporation proposes to put into operation hinges upon the "man on the spot," the directing spirit in the foreign market who is:

To guide manufacturers in catering to trade, protect their interests, and be first on the track for possible orders for them. He is to secure the best agent in the country concerned; will retain the services of technical experts, and will generally communicate every change or development in trade requirements to the members. The home arrangements include an information bureau in the chief manufacturing centers here, and also facilities for advances of money and the guaranteeing of foreign accounts.

Bank Amalgamations

A matter of material importance and of vital bearing upon London's preëminence as the financial center of the world consists in the recent amalgamation of British banks. As a result of this process of concentration of financial power, there are now only five big London banks apart from the Bank of England. One of the most important bank amalgamations, effected in 1918, was that of the London Joint Stock Bank with the London City and Midland Bank. The branches and agencies of the two banks in foreign countries cover the whole world. Sir Edward H. Holden, chairman and managing director of the new concern, in a speech at the annual general meeting of shareholders in London on January 29, 1919, discussed the bank's financing of imports and exports for the past year as follows:

The acceptances amount to £13,146,000 against £8,827,000 last year. These are our acceptances on behalf of Colonial and foreign bankers, and it is through this medium that our imports and exports are financed. We must expect these figures to grow still larger now that the war is over because trade restrictions in this country and in foreign countries are being removed. When goods are shipped to this country from foreign countries they are paid for by the negotiation of the acceptances of the English bankers, and when exports are made they also are paid by the negotiations of these acceptances in one way or another. Of course the payment of these acceptances is ultimately made in London, and this has been one of the means by which London has become the financial center

of the world. We hope, of course, that London will remain the financial center after the war, but this will depend to a large extent upon the accommodation which London bankers are able to afford foreign bankers by way of acceptances.

Sir Edward Holden, on the same occasion, referred to a plan of sending a part of the bank's staff abroad to work in foreign banks to acquire the language of other countries as well as a better knowledge of foreign business.

GERMANY

The victorious outcome of the war for the Allies has deprived German plans for future trade expansion in the world's market of their one vital prerequisite,—victory for the Central Powers. Virtually all of Germany's ambitious plans for international commercial supremacy,—whether they embraced the welding of closer economic relations between Germany and Austria-Hungary, the promotion of her trade with the Near East, with Latin America and other parts of the world, or whether they related to the importation of raw materials, the expansion of her merchant marine and of her oversea banks,—were predicated on a victorious conclusion of the war on the part of Germany. The signing of the first armistice spelled disaster for Germany's ambitions as a leader in international trade.

The elaborate plans for rehabilitating her foreign trade worked out by the new Reichswirtschaftsamt (Imperial Department of Economic Affairs) which was organized during the war; the preparations made by private associations for promoting foreign trade, like the "Deutscher Levante Verband (German Levant Association) and others, appear impotent and innocuous in the light of the helpless economic condition in which Germany finds herself today. The political and industrial upheaval which followed the signing of the first armistice terms but accentuates her plight.

For the time being, at least, Germany is eliminated as an important factor in international trade. Some of her basic industries which figured very prominently prior to the war in shaping Germany's foreign trade policy are paralyzed. Her largest cartels, which during the quarter of a century preceding the war constituted the backbone of Germany's commercial and trades enterprises in foreign countries, are in a state of dissolution. The abrogation

by Luxemburg of her Customs Treaty with Germany caused some of the largest steel and iron plants to withdraw from the German Steel Syndicate. Other difficulties for the Steel Syndicate arise from the Allied occupation of the Saar and Lorraine, where works of other members of this Syndicate are located. It is announced from Essen that the local Workmen and Soldiers' Council has resolved to occupy the premises of the Rhenish-Westphalian Coal Syndicate as a preliminary measure toward the nationalization of the coal mines. Some of the leading plants controlled by the dyestuff cartel are in occupied territory. Far reaching hopes were placed on the ability of the German coal tar dye industry to regain the dominant position which it held in the world markets in the past. However, in view of the rapid development of this industry in the United States and Great Britain during the past four years, a realization of these hopes appears preposterous.

What is true of Germany holds good also as far as the other members of the Central Powers are concerned. Whatever plans for future competition and trade expansion in foreign countries have been formulated and advocated by the respective governments, by trade associations or individuals have been disarranged by the overwhelming industrial and commercial collapse following defeat.

FRANCE

The foreign trade of France has suffered severe losses during the war. While numerous plans for reëstablishing and strengthening her future position among the leaders in international trade have been discussed and advocated with much zeal in the French press, in trade circles and in parliament, the number of constructive measures actually initiated is comparatively small. Nevertheless the farsighted propaganda work of such eminent statesmen and leaders as Ministers Clémentel and Loucheur, Senator Flandrin, M. Vallière, M. Boret, M. Herriot, the energetic mayor of Lyons and others has inspired a number of far-reaching reforms.

The excellent studies of commercial and trade conditions at home and abroad made by the Société d'Encouragement à l'Industrie Nationale merit attention. The stimulus given by the economic research work of this and kindred societies to the metallurgical, electrotechnical, chemical and other industries of France has induced many industrial enterprises to rejuvenate themselves and

to introduce comprehensive reforms of their commercial methods. Several trade associations have been formed for promoting the French export trade. One of these, the National Association for Economic Expansion, was established on December 15, 1915 under the auspices of the Paris Chamber of Commerce.

Among other things the association aims at opening up new markets for French products in foreign countries. The sample fair at Lyons has proved highly successful, and has become an international centre for the exchange of commercial and industrial information. The first fair was held at Lyons in 1916. At that fair \$10,000,000 worth of goods were sold, and another \$8,000,000 of orders were turned away because French manufacturers could not promise delivery during the war. At the 1918 fair there were 3,200 exhibitors divided as to nationality as follows: American, 543; English, 107; Italian, 40; Russian, 1; Swiss, 114; Spanish, 33; Dutch, 22; all the rest were French firms. This year the total number of exhibitors has advanced to 4,700.

The law of April 13, 1917, for the encouragement of the maritime trade, authorized advances to French shipowners in France up to a total maximum of 160 million francs. The loans, bearing interest at 6 per cent are to be used for constructing or purchasing cargo vessels. It is provided in the law that for a period of two years the cargo of such vessels must be destined to or proceed from French ports.

The plan to make the Rhone navigable has been widely advocated during the war. The purpose is to afford Switzerland an outlet to the sea through France, and thus to direct a part of the Swiss overseas trade by way of Marseilles.

On March 15, 1918, the Chamber of Deputies made the general question of commerce and industry after the war, part of its order of the day. On that occasion, amid general approval, M. Vallière presented a program for economic reconstruction which embraced among others, the following points:

1. Reduction of the price of French manufactures by modernization, standardization and improved technique.
2. Improvement of technical education.
3. The coöperation of shops and yards for studies and research of all kinds, for the purchase of raw materials, the discovery of markets, the shipments of finished products at common expense.

4. Adaptation of French products to the taste of customers, as a means toward the conquest of foreign markets.
5. Development and cheapening of transportation.
6. Retention of French money for French enterprise, establishment of financial facilities, such as long credits, etc.
7. Reservation of mineral resources for the French, with limited concessions of mines, and state participation in the profits.
8. Assistance to production, with a view to reducing imports.
9. Assistance with a view to increasing exports of manufactures.
10. Increasing the number of state enterprises, and of those in which the state shares the profit.
11. The deepening of rivers and harbors, building of a merchant marine and of new marine basins.

Several of these proposals have already been initiated and the vigor with which they have been furthered during recent months bespeaks a promising future for the industrial and commercial life of France.

SCANDINAVIAN COUNTRIES

Indications that the business men of Norway, Sweden and Denmark are fully alive to the future competition in overseas trade are plentiful. In November last year a congress of Scandinavian business men was held at Christiania at which trade organization for the post-war period was discussed. In the course of this meeting it was pointed out that during the war the course of development has everywhere been in the direction of concentration, cartels and the formation of monopolies. In all the more important countries and markets in which Norway is interested, competition, it was stated, will be encountered from strong private combinations, and also, to some extent, from rings enforced or supported by the state, with the object of controlling the entire foreign trade. It was argued that, being confronted by great organizations in overseas markets, the work of placing surplus exports at the most advantageous prices and of buying articles of consumption at favorable prices, must be carried out by organization and unity. Exporters were urged to operate in a body, whilst importers were advised to resign themselves to collective operations even on the foreign markets, where the individual would very frequently be subordinate and compelled to accept unfavorable prices. Finally it was pointed out that the conditions of the future will demand a higher mercantile culture all around.

Coöperation with the importers and exporters of neighboring countries—Sweden and Denmark—would also strengthen Norway's position as buyer and seller. This form of economic coöperation in the North seems certain to come to the front in the future, and gain the greatest significance when complemented by the interchange of goods between the three countries.

In Sweden the policy of coöperation for export trade has been put into actual practice on a large scale. Last year twenty Swedish industrial associations combined to form an export council, called the Svenska Exportindustriernas Centralrad. The most important members are the Iron Institute, the Swedish Cellulose Association, the Swedish Wood Pulp Association, the Swedish Timber Export Association, the General Export Association of Sweden, the Swedish Industrial Association, the Swedish Chemical Industries Office, the Swedish Machine Industries Association, the Swedish United Goods Association, and the Swedish Timber Industries Association.

Sweden's plans for developing her commercial future embrace among other things closer relations with the Baltic trade. With this object in mind plans are now being carried out for making Malmo a free port. It is believed that a large volume of trans-shipment trade will be drawn to that port, and that ultimately Malmo will become the leading trade centre on the Sound.

JAPAN

The expansion of Japan's trade and industries during the war has been phenomenal. Large orders for munitions from the Allies and requirements from the Far Eastern countries and the South Seas, where the imports from Germany and other belligerents had ceased to come, enlivened the export trade. The scarcity of freight space throughout the world and the abnormal rise of charterage of Japanese ships engaged in foreign trade stimulated shipbuilding. The sudden shortage of imported chemico-industrial products and of machinery caused new enterprises in these lines to spring up at home. Lastly, the great accumulation of funds owing to the combined result of the first two factors facilitated the expansion of commercial and industrial activities.

Japanese business men were quick to recognize the opportunities open to them in foreign markets. In a systematic way and along

broad visioned lines, actively backed by their government, a well organized foreign trade machinery was established with the result that the value of the total exports from that country was trebled in 1918 as compared with 1913. The value of the exports from Japan to Australia alone increased from \$3,172,830 in 1913, to \$14,469,855 in 1917.

A new department in Japan's foreign trade policy was the official inspection (conditioning) of certain exports. The purpose of the law under which this inspection is carried on is to establish better grades of quality for Japanese export goods. Thus far the compulsory inspection embraces chiefly textile goods. Celluloid manufactures have recently been added, and also starch. It is sought by this means to maintain the export trade in starch which showed an increase in value of 250 per cent for 1917 over the preceding year.

During the war Japan's exports of cotton cloth have been multiplied fivefold in value, and the government realizes that, if the markets newly gained in China, India, the Dutch Indies, Australia, and the Philippines are to be retained, the quality of Japanese cotton cloths must bear comparison with that of cloths of British and other production. Japanese manufacturers will, therefore, be required by the government to keep their exports up to a fixed high standard. The Department of Agriculture and Commerce announced recently that a scheme was in preparation for the formation of an association of textile manufacturers, which would be charged by the government with strict supervision over goods woven for export. The association will also examine such goods through inspection committees, and bounties will be granted by the government to bear part of the cost of conditioning exports.

In Japan the subsidizing of commerce and trade by the state is practiced on a larger scale than in other countries. During the past four years this policy has been pursued with increased vigor particularly in connection with those industries which are calculated to net large increases in foreign trade.

Under a special law enacted in 1915 the government is authorized to give financial aid to her dyestuffs industry. With this backing, several new plants have been built, and the total amount of capital invested in the more than one hundred factories, exclusive of small ones, is reported to be more than 15,000,000 yen.

Combined efforts by the government and the textile and chemical industries of Japan to make their country independent of foreign dyestuff manufacturers tie in with an active trade campaign to introduce Japanese dyes in the markets of the Far Eastern countries. For this purpose Japanese manufacturers of dyes and colors have during the past year shown their products at numerous exhibitions at home and abroad.

Japan supplies about 28 per cent of the total world's consumption of silk and approximately one-third of her total exports prior to the war consisted of raw silk. Comprehensive plans have been made during the war to foster this trade. Under the Raw Silk Industry Act the National Association of Raw Silk Industry of Japan was founded in 1915. The law provides that all local associations shall join the National Association. One of the objects of the new central organization is to develop the export of raw silk and to increase the interests of the raw silk industry. The association has sent a representative to the United States to study the silk conditions in this country and to keep the association informed on all matters pertaining to silk.

The expansion of her merchant marine has been consistently advocated in Japan's foreign trade policy. During the war shipbuilding has been promoted by all possible means, and government subsidies have been freely extended for this purpose. Japanese vessels now run on four great routes to Europe, North America, South America and Australia. There are also lines plying between Japanese ports and Korea, Northern China and nine ports on the Yangtse-Kiang. In return for the subsidies to shipping companies for foreign trade, the Japanese government assumes the right to regulate all inward and outward rates on the products of Japan. It regulates the sailing dates and routes of subsidized boats, and the rates which these boats may charge for export and import cargo, being guided mainly by the desire to build up Japanese foreign trade.

The Japanese banks are active factors in the foreign trade machinery. The Yokahoma Specie Bank, for instance, had its charter modified in order to enlarge its foreign trade department. Other banks also are extending their operations both at home and abroad, and are giving financial help to shipping undertakings. At present they are giving attention to the mineral resources of

China, including those of the rich Hunan province, and are also reported to be considering the establishment of electrical undertakings in the interior of China with Japanese money, machinery and engineers.

Recently the keenness of the Japanese has been very apparent in the systematic way in which they are extending trade with the Dutch Indies, the South Sea Islands, and Australia and New Zealand. A commercial museum is to be established at Singapore by the Department of Agriculture and Commerce of the Japanese government, with the object of extending Japanese trade through that centre. Not only will merchandise be exhibited, but investigations relating to trade and commerce will be undertaken, and the museum is intended to become a central base of Japan's commercial operations in that part of the world. The establishment of similar institutions is contemplated in due course at other places, including Harbin.

THE MARSHALLING OF TRADE FORCES

In the foregoing some of the plans have been mentioned which may be considered typical of the world-wide preparations for post-war competition in international trade. An analysis of the whole situation makes it appear that, in the future, competition in the world's markets will be carried on along different lines than in the past. Improved methods of trade expansion and new policies of trade strategy have been introduced. A much greater degree of solidarity of commercial interests has been brought about through the formation of trade associations and combinations of manufacturers and exporters. Through various forms of state participation in industry, especially by granting subsidies, new domestic industries have been firmly established. By means of bank amalgamations and through interlocking directorates huge agglomerations of capital have been effected. International promoting companies have been formed for acquiring and developing mining, transportation and other concessions in foreign countries.

Purchasers and consumers have organized, likewise, largely as a measure of self-protection against monopolistic exploitation. In European countries coöperative purchasing societies have grown rapidly. The French government has promoted the formation of so-called "consortiums," *viz.*, syndicates for purchasing

and apportioning supplies. In Italy the purchase and sale of several commodities, among them coal, was made a state monopoly under royal decree.

Future competition among the leading commercial nations of the world seems certain to be keener and more intense than ever before.

A survey of the world's trade situation would be incomplete without mentioning a movement to which the war has given a strong impetus and which underlies many of the plans for trade expansion now advocated in foreign countries. This movement aims at establishing economic autonomy. It is most pronounced in Great Britain, France and Germany.

One of the economic lessons taught by the war is the danger of a country's sources of indispensable supplies falling under foreign control. The vital importance to the economic life of a nation both in peace and war, of having certain essential industries firmly established at home, is now generally recognized. Other similar factors helped to quicken this growing movement towards economic nationalism. On an international scale it found expression in the plans to establish a Middle European customs union. It was openly espoused at the economic conferences of the Scandinavian countries, and also at the economic conferences of the Allies at Paris and Rome. The Inter-Empire movement in Great Britain constitutes another phase of this movement. "British goods for British people" has been widely advocated at trade fairs and exhibitions held throughout the British Empire during the past two years. In other countries a similar movement towards national self-sufficiency is noticeable. In line with this policy are the plans for establishing new tariffs, various kinds of exclusion acts and similar measures of economic offense or defense, as the case may be. The debates in the parliaments of the leading commercial nations of the world on the subject of commercial policy after the war plainly show that there is a widely prevailing apprehension that a policy of "after the soldier, the merchant" would develop after the war. On all sides the fear of economic invasion and commercial penetration is voiced, and means to avoid eventualities of that kind are being urged by party leaders.

In view of this situation the demands of the hour seem to point out the need of constructive action on an international basis for

the future protection of commerce and trade. A new international code of regulations for the protection of industrial property against unfair methods of competition, dumping, infringements of patents and trademarks, etc., and potent means for enforcing agreements of that kind through an international tribunal of commerce and trade, may prove to be one of the most important instruments for preventing friction and promoting good will in the commercial theatre of the world.

Economic Factors in the Peace Settlement

By ISAAC LIPPINCOTT

Associate Professor of Economics, Washington University

ONE important result of the war has been the protest against restrictions on trade. This statement does not refer to war control, but to the increasing number of obstructions to the flow of international commerce in the years before 1914. What freedom means has never been clearly stated in these protests, and the connotations are not understood. The opposition to restrictions is largely a product of the revelations of German methods of economic penetration, and of the fear of her growing industrial strength due to her trade practices, and to the combination and concentration of her industries which threatened her rivals with destructive competition.

The establishment of more equitable conditions of trade is urged both by those who see in restrictions a potent cause of future international strife, and by those who advocate the policy of freer trade as a condition for the greatest development of world commerce and industry. The former idea has received the strongest emphasis during the war period. To quote from one of President Wilson's fourteen points,—what is desired is "the removal, as far as possible, of all economic barriers and the establishment of an equality of trade conditions among all the nations consenting to the peace and associating themselves for its maintenance."¹ Elsewhere, President Wilson expressed a similar idea: "Responsible statesmen must now everywhere see, if they never saw before, that no peace can rest securely upon political or economic restrictions meant to benefit some nations and to cripple or embarrass others, upon vindictive action of any sort or any kind of revenge or deliberate injury."

In spite of protestations and notwithstanding the sincere longings for better trade relations the actual policy the nations will follow in the immediate future bids fair not to be freer, but more restrictive. This plan is adopted with relatively little thought of its effect on other nations, or of the long run results on

¹ Quoted from Lindsay Rogers, "The Problems of Reconstruction," p. 290.

the welfare of the nation itself. Recent developments make it clear that the countries will follow that policy in international trade which best promotes their individual interests.

CONFLICTING POINTS OF VIEW

There is thus a strong contrast between ideals and practice, and between things hoped for and things actually sought. It is easy to understand this conflict. Towering above all other considerations is the opposition of present and future economic interests. It is largely a question of the "short run" and the "long run" points of view in international policy. The economic statesman may admit the reasoning of the idealists but he urges that at best economic forces work slowly and with many deviations and uncertainties. He seeks short cuts to his desired goal. More than ever before the exigencies of the present demand solutions which act promptly and surely, and always in the national interest. The future interests of the nation may suffer somewhat because of this policy, but the present critical state of industry makes the sacrifice necessary. Industries have been badly disrupted, markets have been lost, workmen are in a serious state of unrest, huge debts must be paid, and what is more disconcerting, foreign markets must be won in the face of the severest competition the world has ever seen. There is thus a premium on short run measures. That policy is urged which promises quick results. The future must to a large extent take care of itself.

Not only is there a conflict between present and future interests of given nations, but between the interests of the nations. As far as we may glean from present measures there is little indication that the countries will adopt the broad generous policy of giving any considerable amount of aid and support to their rivals in restoring industries; nor will they politely wait at scratch until all are ready to start on substantially equal terms in the world industrial conflict. It is clearly recognized that success will crown the effort of those who look out for themselves, and who employ prompt and vigorous measures of defense and aggression.

Of course, there is no intention of "forcing" the operation of economic laws. The purpose of the prospective regulations is to eliminate as far as possible the operation of certain forces and to

strengthen the workings of others. The purpose of control is to direct the economic stream, to straighten, and perhaps to narrow its channel, so that it will flow in the desired direction with greater velocity. This is the purpose of regulation whether applied to trade within countries or to international relations.

The outcome of the conflicts mentioned above will be to increase the hardships of the nations which are trying to reestablish a normal peace order. Policies which would have caused no unusual irritation in times of peace will now scarcely go unchallenged, partly because the strain of the war has made the peoples of the world more sensitive, and partly because the sorry plight of most nations will cause them to resent measures which might have been considered appropriate when all were financially strong and industrially prosperous. Thus the questions are raised: What policies may be accepted as a basis of friendly trade relations? How has the war affected the outlook of the nations on world trade? What new trade developments have occurred, and what is their significance? The purpose of the following discussion is to answer these questions.

INDUSTRIAL INTERDEPENDENCE

Any solution of the question of friendly relations will miss its mark which overlooks the industrial interdependence of the countries. That the economic welfare of one region is inextricably bound up with that of all the others is now axiomatic. Restrictions by one nation which seeks to place itself at a point of vantage creates hardship for its rivals near and far. The regulations incident to the war have made this point clear. Distant countries have felt the misfortunes of the war because their customary industrial relations with the warring nations were disturbed. On the one hand they have been deprived their usual supplies of manufactured goods, and on the other they have been unable to market their surplus of raw materials. Had the neutrals been industrially self-sufficing, war regulations of belligerents would have had little effect. But they have passed beyond this stage, and their hardships have been a product of their dependence.

What is true for war regulation is true to a smaller extent for control of trade in times of peace. A most impressive feature of

economic interdependence is that it increases rapidly with industrial progress. To give only a few examples: The growth of the factory system tends to make manufacturing nations more and more dependent on the outside world for food supplies. It does more. It increases the need of foreign markets for the surplus of manufactures, and makes necessary new foreign sources of raw materials. Great industries are founded and workmen trained under the assumption that trade will continue to flow in the established channels and probably will develop new ones. The very old enterprise of stone cutting at Idar and Oberstein draws its materials from every part of the world, and the new vegetable oil industry at Hull, England, looks far beyond the borders of Britain, and even beyond the confines of the empire for the materials on which its prosperity depends. Similar illustrations might be found in abundance. Technical improvements, of course, increase this dependence. Only a few years ago, three commercial forms of iron sufficed for the manufacture of all manner of iron and steel products. But great changes have taken place. Small quantities of a variety of rare metals garnered in from all quarters of the globe are now required to give exact properties to many kinds of steel products. Each use demands a property which is peculiar to it. Foreign restrictions on the supply of the necessary metals may cause a serious dislocation of industries. No country, however great its resources, is able to provide the materials for the manufacture of its varied products. Thus the nations with diversified industries are dependent on the outside world for supplies. Inventions, improvements, and the growing variety of tastes all contribute to the increase of this dependence.

Interdependence is one of the most important factors in foreign trade. If our purpose were to develop this argument it could be shown that under the influence of this principle trade associations, such as foreign chambers of commerce, are springing up all over the world, that intricate systems of credit and banking have been developed, and that the world has been girdled with vast systems of communication. Restrictions on commerce operate against the advantages gained by this interdependence. They cause irritations and hardships. They are a potent cause of international strife. They impose handicaps on poorer countries, and in the long run work to the disadvantage of the richer ones.

All this suggests principles which should guide us in framing satisfactory peace terms. Freedom to develop should include economic as well as political factors. Commercial measures should not be devised which deprive countries, or regions, of their native advantages whether of resources, of capital, of abundant labor supply, or of other elements of production. Where economic exploitation takes place, it should have regard for the welfare of the people whose country is exploited. In sum, the goal should be to secure and perpetuate the mutual advantages of trade and to refine the methods.² It goes without saying that the nations should prevent if possible all forms of unfair competition in international trade, the results of which are to deprive countries of their industrial opportunities and to make them dependent on others. Normally, unless a country drives hard bargains and practices some of the unfair methods, trade is of advantage to all parties concerned. It is a lever which lifts the poorer and more backward countries to economic progress. Where foreign capital, for example, builds railroads and electric lines, erects power plants, improves harbors, develops resources and founds industries, it gives employment to the labor of such countries, provides them with products for export, increases their purchasing power, stimulates their ambition, and in general raises them in the scale of living. Trade is thus a civilizing force. The benefits accrue as well to the people of the countries exploited as to foreign capitalists who provide the funds and enterprise. In the case of trade between highly developed countries commerce is the result of a sort of division of labor by which each nation devotes its attention to the industries in which it has advantages, and again, where it is pursued without restrictions it is a beneficial and stimulating process. With some exceptions this was the course of trade development before the war, both in the case of large and small countries.

This does not mean, of course, that trade moved across national boundaries without some measure of control. Fiscal measures have long been bound up with commercial policy; the trade of all countries has been made to yield revenue in some form. Besides, the commercial policies of most countries have comprehended sometimes bounties, sometimes protective measures of all degrees

² Cf. Lippincott, in *Washington University Studies*, VI, No. 1, p. 44.

of rigor, sometimes both bounties and tariffs. And not only imports, but in the case of some countries, exports also have been taxed. But, withal, it can scarcely be said that these measures seriously impeded the flow of trade, or as a rule, that they produced hardships in any country.

NEW FORMS OF TRADE REGULATION

But even before 1914, there were some indications that the old methods of regulation were beginning to pass away,—or at least were being supplemented by others. The growing industrialism alarmed those countries which were in its meshes. The mere fact that the nations were dependent on the outside world both for markets, for finished products and for raw materials made them eager to control the conditions of trade, external as well as internal. Thus inevitably new methods were devised to accomplish this end. Hence the policy of purchase of mineral rights abroad by the capitalists of certain countries, of investments in plantations and manufactures, of control over railroads and port facilities. All the while, industries developed into larger units. This was notably the case with banking and with certain kinds of manufacturing and merchandising. The old kind of competition in which the traders of the nations were largely the factors, was giving way to a new kind which was more powerful and destructive, namely, the method by which the traders of the country combined into huge business units for the purpose of sale of goods abroad, and for the purchase of foreign raw materials. Control, therefore, operated not only through national commercial policies, but also through the measures of these great organizations. The outcome of this system was to thwart the wholesome operation of the laws of trade, to confer great monopoly powers on groups of industries, and to impede the industrial and commercial growth of the countries which failed to employ methods of defense. Meanwhile, unfair methods were creeping into foreign trade, with the result that in a number of instances countries which enjoyed certain industrial advantages were not able to utilize them.³

That the traders of the competing countries were not seriously alarmed at this state of affairs was due to the fact that the new

³ Cf. Henri Hauser, "*Les Methodes Allemandes d'Expansion Economique*," pp. 96 ff., 100, 102, 130 ff., 207 ff.

methods worked through secret and subterranean channels. The immanent dangers were scarcely appreciated. From an industrial point of view, one of the most important results of the war has been the revelation of the magnitude of control exercised by a small group of German industries, aided by the great German banks.

It is clear enough now that the enormous power latent in economic penetration made possible the control of industries far beyond national boundaries, and that it gave an advantage chiefly to the country which was most thorough in the organization of its industrial forces. In some respects economic penetration yielded all the malignant effects of monopoly. It secured control not because of the possession of superior resources, but principally through the powers incident to organization. Competing traders were thus unfairly handicapped, and some countries were deprived of the advantages of their industrial opportunities.⁴ Had not the war intervened to prevent the further extension of this system, it would have probably stimulated in the near future, vigorous measures of defense which, in turn, would have ushered in an era of bitter feeling among the nations.

The new trade policies of the European countries are designed partly as measures of defense against the recurrence of such trade methods as those described above; another purpose is to enable the countries to recover their trade losses as quickly as possible; and still another is to facilitate industrial and financial reconstruction.

With respect to the future commercial plans, two notable developments occurred while the war was in progress. One was the proposed commercial alliance between Austria-Hungary and Germany, and the other the agreements contained in the Paris Economic Pact.⁵ The former needs no discussion because it is a thing of the past. But the Economic Conference of the Allies yielded some results which promise to affect for some time to come the foreign trade policies of the leading European countries.⁶

⁴ G. B. Dibblee, *Germany's Economic Position*, pp. 47 ff.

⁵ *Commerce Reports*, Feb. 11, 1916, pp. 582-583.

⁶ Cf. *Interim Report of Committee on Commercial and Industrial Policy* (London, Cd. 9033).

EFFECTS OF THE PARIS ECONOMIC PACT

From June 14 to 17, 1916, representatives of the Allied governments met at Paris for the purpose of fulfilling the mandate of the Paris conference of March 28, 1916, to give "practical expression to their solidarity of views and interests, and of proposing to their respective governments the appropriate measures for realizing this solidarity." The reading of the Pact seems to indicate that it provides for defensive arrangements. Thus the concluding sentence states:

Whereas for the purpose of their common defense against the enemy the Allies have agreed to adopt a common economic policy, on the lines laid down in the resolutions which have been passed, and whereas it is recognized that the effectiveness of this policy depends absolutely upon these resolutions being put into operation forthwith, the representatives of the Allied governments undertake to recommend their respective governments to take without delay all the measures, whether temporary or permanent, requisite for giving full and complete effect to this policy forthwith, and to communicate to each other the decisions arrived at to attain this object.⁷

The Pact provided three groups of policies, namely, for the war period, for the transition or reconstruction period, and for "permanent measures of mutual assistance and collaboration among the Allies." The essence of this document, as one may glean from its contents, is to put these countries on an economic defensive against prospective German trade methods. We are interested only in the permanent measures, since these are designed to affect future trade relations.

These permanent measures may be grouped under three titles. They include means for making the Allies independent of their enemies as regards raw materials and manufactured articles essential for the normal development of their economic activities, methods of promoting trade among the Allies, and provisions for uniform laws covering patents, trademarks and copyrights. It is expected, under the measures proposed in the first title, that the Allies will adopt certain measures to secure their independence of Germany in the case of raw materials and commercial and financial organization. The policy also contemplates state assistance for certain enterprises of a specially desirable character, such as

⁷ Recommendations of the Economic Conference of the Allies (London, Cd. 8271).

encouragements to scientific and technical research. Possibly also, the measures involve customs duties of a "temporary or permanent character." Said the Pact: "Whatever may be the methods adopted, the object aimed at by the Allies is to increase production within their territories as a whole to a sufficient extent to enable them to maintain and develop their economic position and independence in relation to enemy countries."

The Paris Pact has exerted both a direct and an indirect influence on the course of English legislation. Directly it is responsible for the passage of several important laws. Indirectly it has called attention to a dangerous trade situation which calls for remedial measures.

THE NONFERROUS METAL ACT

The British government, for example, has deemed it expedient to eliminate enemy alien influence from the domestic metal markets. The Nonferrous Metal Act, which received royal assent on February 6, 1918, was designed for this purpose.¹ The title of the law indicates that its purpose is to "restrict temporarily the persons who may engage in business connected with nonferrous metals and metallic ores." The persons referred to, as the act subsequently shows, are those of enemy nationality or of enemy connections. The measure covers zinc, copper, tin, lead, nickel, aluminum, and other nonferrous metals and ores which the Board of Trade may designate by order. It is not lawful "for any company, firm, or individual after the expiration of six months from the passing of this bill, or such longer period as the Board of Trade may generally or in any particular case allow, to carry on the business of winning, extracting, smelting, dressing, refining, or dealing by way of wholesale trade in metal or metallic ores to which this act applies, unless licensed to do so by the Board of Trade." Licenses are to be granted in prescribed form after certain requirements have been fulfilled, including the furnishing of information, and the payment of a small fee. Even the definite limit set for the operation of the act will carry it into the peace period, or at the discretion of the Board of Trade, for an indefinite time.

Already, a number of licenses have been granted under the

¹ *Commerce Reports*, April 1, 1918, pp. 4-6.

provisions of the act.⁹ The new law is undoubtedly something more than a defensive measure, although the other purposes are not stated. It limits trading in the given metals, and puts control, through a system of licenses, in charge of the Board of Trade. There is no indication as yet that the measure has caused hardships to any one except those against whom it was directed, namely, enemy traders; but the new policy contains great potentialities as a method of regulation. It establishes a precedent which may be extended, slowly at first but at a subsequent time, more and more rapidly, as a trade weapon against all rivals. Such an outcome could hardly be accepted as a condition which would make for friendly trade relations.

Various reconstruction measures in England have control both of imports and exports for their purpose. During the early discussions of reconstruction measures the proposal was made to prohibit for three years after the close of the war "the importation . . . of goods of any class, description, or origin, or produced or manufactured in part in any country or place specified in the order, either generally or from any country or place named in the order."¹⁰ Judging from recent discussions in England, the policy of restriction will not be as thorough as that suggested in the quotation above. The following report of a speech of Sir Albert Stanley, President of the Board of Trade, gives some idea of the present status of government opinion:

It was within the knowledge of all that the Government found it necessary during the war, either because there was insufficient tonnage, or for reasons of exchange, to impose severe restrictions upon a large proportion of the imports brought into the country. The time had come to consider the relaxation of these restrictions, and it had been suggested by various interests that they should retain for a time their control. The reason advanced was that owing to the demands which the Government had made upon manufacturers, and to the enormous changes which had taken place, the Government should for a time keep a restraining hand upon the flow of imports until our manufacturers had had an opportunity to reestablish themselves on a peace footing. He thought that was a fair proposition, and one that should have the acceptance of the Government. At the same time they all desired to continue on the same close and friendly relations with the Allies. Friendly rivalries there must be, but

⁹ Cf. current issues of the *Board of Trade Journal*.

¹⁰ Tariff Series no. 39, British Control of Imports and Exports (*U. S. Dept. Com. Publications*), p. 6.

there was plenty of room in the world for everybody, and by close coöperation, good understanding, and a friendly spirit we should secure the peace of the world better than in any other way."¹¹

No one could object to the spirit of this policy, but its practical application will encounter many difficulties if it is to be free of the charges of discrimination, or of the denial to friendly traders of opportunities which they might legitimately claim.

A considerable list of restrictions is proposed for the protection of the various engineering trades.¹² Thus said a recent *Commerce Report*:

There are large classes of articles imported from abroad which are made in such vast quantities and which have such manufacturing and inventive resources behind them and good will attached to them as to make competition extremely difficult. Therefore, if the manufacture of such articles is to be developed, it is necessary the committee says, that some form of assistance should be given toward overcoming the difficulties of competition. In the detailed reports respecting the various trades will be found numerous instances in which some form of protection is recommended, this protection being sometimes tariff duty, sometimes exclusion for a period of years of the competing articles, sometimes restrictions of imports from abroad.¹³

It will be observed that this policy creates a different condition of trade from that which prevailed before the war. It appears from the report that in the case of the enumerated articles, foreign manufacturers are to be denied the advantages which superior resources, or technique, or manufacturing skill have given them, and that they are to be denied also the benefit of the good will which they have built up perhaps by years of service to British consumers. This is a movement away from that kind of trade relations that makes for more friendly relations.

BRITISH IMPERIAL PREFERENCE IN OPERATION

Another tendency may be noted. While England's foreign competitors might complain mildly of the measures discussed above, they would regard in a more serious way preferential treatment by England to British dominions, or *vice versa*. Nevertheless, there are a number of indications that this policy will be

¹¹ *Board of Trade Journal*, Jan. 30, 1919, p. 128.

¹² For an early report see *Interim Report on Certain Essential Industries* (London, Cd. 9032).

¹³ *Commerce Reports*, March 8, 1919, p. 1093.

followed. There is a suggestion of a preferential policy in the following announcement from the American Consul General in London: "Pursuant to the pledges that all articles on the list of prohibited imports, when the produce or manufacture of any part of the British empire shall be permitted to be imported, notice is hereby given that a general license has been issued permitting such importation."¹⁴ And on March 14, our Consul General cabled that "according to an announcement made in Parliament on Thursday evening on behalf of the Board of Trade, the following articles heretofore restricted are now admitted free from import restrictions from the British overseas dominions. . . . Importations of these goods from the United States continue to be subject to the usual restrictions."¹⁵ The list includes cinematograph films, clocks, mineral waters, beer, playing cards, mechanical lighters, musical instruments, brandy, rum, matches, foods containing sugar, tea, tobacco, gold and wine. The operation of the preferential policy is also seen in the restrictions on the importation of American dyestuffs into Australia.¹⁶

In connection with the above, the following quotation must be taken *cum grano salis*, but at least it is an indication of the feeling aroused by restrictive measures as to peace-times commerce:

American manufacturers will abandon British markets and devote attention to South American fields on account of the hard trade rules, according to London copyright dispatch to the *World*. Trade experts from America in British capital studying situation announce intention of advocating embargo on raw materials. When they return home question will be raised whether United States will permit exports to England through American ports of Canadian manufactured goods.¹⁷

AMERICAN TRADE PLANS AND THEIR EFFECT ABROAD

It should be observed that our own prospective trade methods are closely scrutinized in England, possibly for the purpose of detecting measures which may operate unfairly for British merchants and manufacturers. On January 30, the *Board of Trade Journal* reported that "The Governors of the cotton-growing States have issued a proclamation calling on business men and merchants to 'organize and unite with the determined purpose of

¹⁴ *Commerce Reports*, March 14, 1919, p. 1217.

¹⁵ *Ibid.*, March 17, 1919, p. 1265.

¹⁶ *Ibid.*, March 4, 1919, p. 993; March 18, 1919, p. 1298.

¹⁷ *Wall Street Journal*, March 13, 1919.

withholding from sale all cotton until a price can be obtained that will cover the cost of production, plus a reasonable profit.' It has been resolved to 'urge farmers and dealers not to sell cotton for less than 35 cents a pound, basis middling.'"¹⁸ Likewise, the *Journal* has called to the attention of its readers the fact that "the Secretary of the Interior Department, the Director of the Bureau of Mines, the Chairman of the War Trade Board, and other Government officials" are trying to work out a plan for legislation which will embody the following proposals:

That the Government place a restriction against the importation of manganese and other minerals which may be more cheaply produced abroad, for a given period, so as to give the American producers an opportunity to get rid of the material that they have on hand; and that the Government appropriate outright a sufficient sum of money to pay the losses of persons who went into the business of the production of these minerals at the request of the Government, and to write it off as a war loss.¹⁹

Our proposed restrictions on the importation of wool, and the operation of our laws permitting combination for foreign trade are receiving study and comment in England.

We might add in this connection the foreign trade policy recommended by our Tariff Commission. It is as follows:

Equality of treatment should mean that the United States treat all countries on the same terms, and in return require equal treatment from every other country. . . . Each country—the United States as well as others—should be left free to enact such measures as it deems expedient for its own welfare. But the measures adopted, whatever they be, should be carried out with the same terms and the same treatment for all nations.²⁰

In the event that American commerce receives "unequal treatment" at the hands of foreign countries, the Commission recommends the enactment by Congress of penalty duties to be imposed at the discretion of the President on the products of the countries which discriminate against the United States. Foreign countries might read into some of these statements a policy of restrictions, particularly with reference to the clause which states that we should be left free to enact such measures as are deemed "expedient for (our) own welfare." While subsequent statements con-

¹⁸ *Board of Trade Journal*, Jan. 30, 1919, p. 143.

¹⁹ *Ibid.*, Feb. 13, 1919, p. 214.

²⁰ *Official U. S. Bulletin*, March 5, 1919, p. 2; *Second Annual Report of the U. S. Tariff Commission* (1919), p. 27.

tain the promise of "equal treatment," they offer next to nothing in the way of more liberal dealings.

We have said enough to indicate the present trend of foreign trade policies in England and the United States. From the reports that come to us from other parts of the world, it is clear that the countries are moving away from even that degree of freedom which existed in 1914. It may be for a long or for a short period depending on the time it takes to restore something like normal conditions, upon the severity of competition, and upon the momentum acquired by the new measures. We know full well from our own experience, that temporary or emergency measures tend to become a fixed part of our industrial system. It is to be expected that a similar experience will be the history abroad, unless unusual efforts are made to check the tendency.

REASON FOR IMPOSITION OF RESTRICTIONS

This movement in the direction of restrictions is due, in a general way, to the exceptional conditions created by the war. First, there is the need of revenue. Commerce will be made to bear its part of this burden. The taxes, or tariffs, which will be imposed will check the freedom of movement of goods.

Second, there is the need of protecting or defending new industries. It is hardly possible that governments will deny aid to industries which have grown through service to the country in time of war, nor to other industries which have sprung up during the war period. It will be regarded as a national loss if those industries are crowded out by competition from abroad. Not only will it be a loss to capitalists but to laborers who have acquired special training in such industries.

Third, the war has greatly stimulated the desire for greater self-sufficiency. This is the trend as between groups of nations, as is indicated by the spirit of the Paris Economic Pact; it is notably the case with the "key industries," particularly in England and in France; it is the case with a few of the belligerents whose manufactures have generally been greatly stimulated by the war; and finally, it is the case with some of the neutrals whose industries have undergone a considerable transformation during the war. We may give several illustrations. With regard to Italy, an American consul recently reported that "the war has

injected new life into the manufacturing industries of Italy. The greatest progress is seen in the chemical, electrical, and metallurgical industries, which now produce hundreds of articles that before the war had to be obtained from abroad. In all lines of industry, however, consolidations of companies, increases of capital, and extensions of existing plants are the order of the day."²¹ With reference to South America, one of our consuls reported that "the serious dislocation of trade occasioned in virtually all Latin American countries by the war has in the case of Brazil brought about changes of such far reaching significance as to mark a new period of growth in the industrial and commercial life of the country."²² Similar reports come from South Africa, from Australia and from Japan. Herein will be found the occasion for the widening, and perhaps for the stiffening, of the tariff policies of such countries, with the hope of rounding out the industrial systems of such countries.

Fourth, the war has given an abundance of training in new methods of controlling commerce. Trade may be controlled not only through the operation of systems of tariffs, but by export and import licenses. Such measures are relatively easy to administer; they operate quickly and thoroughly, and to a large extent are a more effective means of control than tariff regulations. There is scarcely a country that has not had some experience with this method of control, and it is not probable that such an effective instrument will pass into disuse.

Fifth, the ability to restore normal conditions at home is, with many countries, largely dependent on their ability to market their goods abroad. Competition will be severe. The nations must employ their full economic strength for this purpose, and avail themselves of such commercial policies as will work promptly for this end.

Finally, the war has greatly stimulated the combination movement. Competition will be more severe because it will be waged by larger and more powerful units. Added to government control through tariffs and import and export regulations will be that of the great industrial combinations. One of the principal

²¹ *Commerce Reports*, April 26, 1918, p. 353; May 25, 1918, p. 760; July 20, 1918 (Supplement), p. 3.

²² *Commerce Reports*, Aug. 26, 1918, pp. 756 ff.

occasions for the development of the combination movement in European countries has been the need of preparing for post-war competition. The case for England has been stated as follows:

The financing of our industries (after the war) will be immensely facilitated by trade organization. During the war we have seen our productive industries organized on a large scale and under the control of the State. Both organization and control were forced on us by the war. As regards State control, I hope and believe the necessity for it is temporary. As to trade organization, I firmly believe that the necessity for it will remain after the war. . . . The day of small industries on individual lines is gone. Our manufacturers and traders must organize for united effort. This will have the closest bearing on the question of finance. An unstable, unorganized industry is the despair of bankers. I have confidence in stating that an industry organized on large lines has seldom lacked financial support in this country, and in spite of the financial stringency we shall doubtless have to face, it is not likely to suffer in the near future.²³

Elsewhere it was said:

The policy of the Board of Trade after investigating the question was that if British manufacturers were going to increase their export trade after the war, if they were even going to regain the trade lost, it was essential to get together in some sort of trade combination. They were prepared to face the question of trusts or combines. If they were to make a stand against combinations in other countries, it would be necessary for them to adopt methods somewhat similar to those which were employed abroad.²⁴

In Great Britain great progress has been made in organizing business on a large scale.²⁵

For a number of years, combination has characterized the trend of development among American industries. Our traders and manufacturers are now permitted to combine for the purpose of exploiting foreign trade. Not only have we given such consent to this policy as is involved in the law, but it appears that the Federal Trade Commission has actually recommended that the German cartel system be legalized for American foreign trade.²⁶ Combinations are, of course, at home in Germany. The war strengthened this movement, and the after-war measures promise a further development in the same direction. Said a recent

²³ *Commerce Reports*, Aug. 19, 1918, p. 659; *Official U. S. Bulletin*, Jan. 9, 1918, p. 8.

²⁴ *Commerce Reports*, Oct. 11, 1917, p. 148.

²⁵ Lippincott, *Problems of Reconstruction*, pp. 232 ff.

²⁶ Cf. Federal Trade Commission report on "Combination in the American Export Trade."

Commerce Report: "The German press announces several large measures which are either partly carried out or projected, and which involve the efforts of various lines of trade to bulwark themselves for the coming struggle. A veritable network of organizations is growing up, which may be divided into two groups, those which are commercial-scientific and those which are purely commercial."¹⁷

Further illustrations are unnecessary. World trading is in the midst of new conditions, and is confronted with new dangers. It will now require all the skill the statesmen can muster to keep the countries out of commercial wars. The principles named on a former page should serve as the ultimate goal; but the best that can be recommended for the present is that foreign trade should be purged of unfair methods, that discriminations should be avoided, that preferential treatment of favored nations or of favored regions should be reduced to a minimum, and that the new methods of export and import control should not be applied in such a way as to deprive countries of opportunities they might legitimately claim. In all instances, the commercial policies of the nations should be characterized as reasonable and fair, and the test of these terms should be found in the beneficial effects not on one nation but on all.

¹⁷ *Commerce Reports*, March 17, 1919, p. 1265.

The Activities of the Government in Promoting Foreign Trade

By L. F. SCHMECKEBIER

Chief of Division of Research, Bureau of Foreign and Domestic Commerce

IN the development of foreign trade the three main factors to be considered by the manufacturer are markets where the goods may be sold and general economic conditions in these countries, methods of transporting the goods overseas to their destination, and means of financing the transaction.

For some years the Bureau of Foreign and Domestic Commerce, in coöperation with the Consular Service of the Department of State, has been supplying the information regarding markets and economic conditions, but it has remained for the disturbed conditions in shipping and commerce, due to the war, to develop governmental organizations which are concerned with methods of transportation and the financing of foreign business.

TRADE COMMISSIONERS

The work undertaken through the Bureau of Foreign and Domestic Commerce, and the Consular Service may be roughly divided into two main classes: that of the trade commissioners, commercial attaches and consuls traveling or located in foreign cities and that of the staff of the Bureau of Foreign and Domestic Commerce in Washington. A feature of American trade promotion, which has not been developed to the same extent by any other country, is the work of the trade commissioners who are investigating the markets for specific groups of American products. These investigations are made by trade commissioners of the Bureau of Foreign and Domestic Commerce who have practical knowledge of the industry under consideration, because specialization has become such an important factor of industrial development in this country that it is impossible to give proper attention to the needs of a foreign market unless the investigator has a thorough grounding in the technique of the industry. These investigators are assigned to a particular country or a group of countries and study all the phases of economic and industrial

development that may have a bearing on the sale of American products. These factors include roughly the general character of the population and its purchasing power, the kind and quality of goods that find a ready sale, the foreign source of supply or the domestic production, proper methods of packing and shipping, accepted principles of sales representation, and the credit terms that must be offered. At present the following market investigations are under way: construction materials and machinery in South America, textiles in South America, furniture in South America, agricultural implements in France, motor vehicles in Europe, leather trade in Europe, lumber in Europe, industrial machinery in France, Italy, and the Far East, jewelry and silverware in South America, electrical goods in Spain and Italy, chemical industries in France, and phosphate rock in Europe.

In addition there are under way investigations of various industries and trade activities that may offer a field for American products, or may assist in the marketing of American goods. Among these may be mentioned the mineral resources of the Far East, the mining industries of Spain, banking and finance in England and Spain, advertising methods in South America, and ports and transportation facilities in the Far East.

Owing to the general disturbance of trade and industry throughout the world as a result of the war, it has been deemed advisable to supplement the special investigations by some general studies, with a view to obtaining comprehensive and first hand reports on the economic situation in the principal countries of the world. These general studies are being made in Belgium, Denmark, England, France, Greece, Italy, Netherlands, Norway, Roumania, Spain, Sweden, Bolivia, Colombia, Paraguay, Venezuela, Dutch East Indies, Mexico, and the Union of South Africa.

COMMERCIAL ATTACHES AND CONSULS

The Bureau of Foreign and Domestic Commerce is permanently represented in foreign countries by commercial attaches connected with the American Embassy or legation in each country, attaches at present being located at Buenos Aires, Copenhagen, The Hague, Lima, London, Madrid, Melbourne, Paris, Peking, Rio de Janeiro, Rome and Tokyo. The duty of the commercial attache is to keep in touch with the larger aspects of the economic and indus-

trial development of the country to which he is accredited, and to submit general reports which will serve to guide American business men who are seeking information regarding foreign markets for their products. It is not the function of the commercial attache to furnish lists of dealers or secure representatives for American concerns. It is their duty to point out significant developments in the economic life of the country to which they are accredited, and to pay special attention only to the larger aspects of American trade, and the general opportunities for strengthening our commercial position in foreign markets.

The details of trade promotion in foreign countries are left to the American consuls who are under the supervision of the Department of State, but whose commercial reports are transmitted to the Bureau of Foreign and Domestic Commerce for the information of the American exporter. In addition to a comprehensive annual report on the trade and industry of his district, the consul makes reports from time to time on specific commodities which offer a good field for the American merchant, or on special opportunities for placing American goods. The consul offers a convenient and acceptable mode of bringing together the American exporter and the foreign importer. From the consul or from lists that have already been submitted by the consul, the American exporter can obtain the names of merchants who are interested in his products, and the foreign importer on his side can be put in touch with the manufacturers of the products he desires to buy. In many cases the consul can place the foreign buyer in direct touch with the manufacturer of the goods needed. In other cases the same result is accomplished by forwarding to Washington information regarding the goods desired by the importer, so that an appropriate notice may be published by the Bureau of Foreign and Domestic Commerce for the benefit of the exporters in the United States.

The home service rendered by the Bureau of Foreign and Domestic Commerce consists in supplying inquirers with classified data that have been submitted by the consuls and the representatives of the bureau, and also in furnishing specific information which can be obtained from the foreign publications on file in the library of the bureau. Among the data that are available in Washington may be mentioned information on foreign tariffs and

trademarks, foreign statistics of imports and exports, and occasionally of production, clippings from foreign journals, and statistics on the trade of the United States. Some knowledge of the tariff system of a foreign country is absolutely essential to the exporter, as on it depends to a large extent the price at which his product can be marketed. If the tariff is high on a particular product, it may raise the price to such an extent that the American manufacturer cannot compete with the domestic manufacturer, or in many cases it may keep him out of the market altogether. The tariff also has an important bearing on methods of packing, because in some countries the duty is based on the gross weight, while in other countries it is based on the legal weight which includes the commodity and its immediate container, but not the case in which the separate containers are packed. Closely allied to tariff questions are those relating to the protection of trademarks, the requirements regarding consular invoices, the regulations governing commercial travellers and their samples, and the import and export restrictions which may be in effect during time of war, or economic transition. Through its files of official rulings and decrees, the bureau is enabled to answer these questions expeditiously without the necessity of awaiting a reply from a foreign country.

In the line of statistics, the Bureau of Foreign and Domestic Commerce is prepared to assist the exporter by giving him both the export statistics of the United States, and the import statistics of foreign countries. The assembling and publication of the statistics of the foreign trade of the United States constitutes one of the primary functions of the bureau, and these statistics offer a good guide to markets that have already been developed for American products. The classification of commodities is being revised so that in the future statistics will be given for many commodities that were formerly included in some general group. Likewise the period of annual publications has been changed from the fiscal year ended June 30 to the calendar year, so that the American statistics may be more easily compared with those published by foreign countries, the greater part of which are on the calendar year basis. In the field of foreign statistics, the bureau is able to supply from its collection of foreign commercial reports the latest available data on imports and exports as classi-

fied by the country concerned. These statistics are of great value, as they indicate the principal sources of supply and the countries with which the American exporter must compete. The bureau has also numerous lists of dealers in foreign countries which have been submitted at various times by American consuls or trade commissioners.

ENCOURAGING MARKETS FOR FARM PRODUCTS

The Bureau of Markets of the Department of Agriculture has recently undertaken work looking to the development of foreign markets for unmanufactured agricultural products. It is planned to send to Europe in the near future several agricultural trade commissioners as permanent representatives to report on conditions and to study the marketing and distribution of American farm products. According to a recent announcement issued by the Bureau of Markets the work will comprise studies on the supply of agricultural products in foreign markets and the export surplus in the principal foreign countries with which the United States competes, the consumption and demand in the principal importing countries, the market preference as to kinds of products and the requirements as to grading, packing, and branding, the channels of trade through which the products pass and the business practices involved, the methods and cost of marketing American and foreign products, methods of financing export trade in agricultural products, export practices in forwarding, storing, transporting and insuring agricultural products, the economic conditions influencing the marketing of American agricultural products, and trade opportunities for American agricultural products. The commodities to be included in the investigations by the Bureau of Markets are grain and grain products, dairy and poultry products, fruits, vegetables, nuts, honey, cotton and cottonseed products, livestock, meats and tobacco.

The control of shipping and the building of a merchant fleet are activities that have developed as a result of the war. Before 1914 the foreign trade of the United States was carried mainly in foreign bottoms and while various methods for the establishment of a merchant marine had been proposed, there was no definite and concerted action looking to the operation of ships by the government itself. The demoralization of shipping was coincident with

the first day of the war. German shipping was swept from the sea within a few days. The development of submarine warfare added to the perplexities and difficulties of the American shipper, because as the English tonnage diminished the English government was compelled to withdraw many ships from their regular runs in order to furnish transportation for supplies of every kind. Our own entry into the war and the critical events of the spring of 1918 before our merchant fleet had been developed to any extent, added to the difficulties of the exporter, as almost every available ship was needed to carry troops and supplies to Europe. During these critical months it was possible to allow our foreign trade only enough ships to import commodities that were essential to our own welfare, and to carry to foreign countries supplies that were absolutely needed.

A recent report by Mr. Hurley states that in August, 1914, the United States sea-going merchant marine of 500 gross tons and over amounted to 1,494 sea-going merchant vessels of 2,706,317 gross tons; on November 11, 1918, the date of the armistice, the grand total was 2,113 sea-going vessels of 5,515,180 gross tons. The total construction in the United States during the war amounted to 875 vessels of 2,941,845 gross tons. The purchases from aliens amounted to 233 vessels of 883,854 gross tons; 66 steamers of 139,469 gross tons removed from the Great Lakes to the high seas, and 31 vessels of 39,219 gross tons were acquired from various sources. Decreases due to enemy action, marine risk, sale, etc., amounted to 1,145,524 gross tons. With the stoppage of shipments of munitions, after the signing of the armistice, a large part of the newly developed merchant tonnage became available for commercial purposes, and as fast as circumstances will permit the Shipping Board is supplying vessels on all the trade routes where such service is demanded. That board is also keeping close track of tonnage movements in all parts of the world, as well as freight rates that are offered by nations that are competing with us in foreign trade. These rates are being assembled by the Shipping Board both for the purpose of determining the effect of the competition of other countries, and to serve as a guide in adjusting the rates on American ships so that the American manufacturer will not be at a disadvantage.

OUR CHANGED TRADE BALANCE

Another development of the war has been the conversion of the United States from a debtor to a creditor country. We have not only taken back practically all of our securities that were held in Europe, but in addition both private investors and the government itself have made heavy loans to our European Allies. Added to this we must take into consideration the fact that the Allied countries in Europe will need enormous quantities of material for industrial reconstruction, and perhaps not for several years will it be possible for them to ship enough merchandise to offset their own purchases. We are, therefore, confronted with an enormous balance of trade in our favor, which results in a rate of exchange which is very disadvantageous to our purchasers, and which is a hindrance to purchase in our markets.

It is generally agreed that extensive credits must be made if we are to take part in the industrial reconstruction of Europe. In order to assist the American exporter in financing his operations, the Act of March 3, 1919 (Public No. 328) provided the War Finance Corporation of the Treasury Department with a fund of a billion dollars which may be advanced to exporters if the exporter is unable to obtain funds upon reasonable terms through banking channels. The detailed method of administering this Act has not been worked out by the War Finance Corporation, but the law provides that the loans may be for terms not exceeding five years, and that the rate of interest charged shall not be less than one per cent per annum in excess of the rate of discount for ninety day commercial paper, prevailing at the time of such advance at the federal reserve bank of the district in which the borrower is located.

The favorable balance of trade which is likely to prevail for some time renders it highly desirable that the American public pay more attention to the investing of funds in foreign securities. The investment of such funds will tend to stabilize exchange, as the proceeds of the loan will be represented by credits in this country, against which foreign importers may draw their bills. These investments will also be of a decided value in increasing our foreign sales as American representatives in charge of foreign property controlled by Americans will naturally purchase their

supplies from American houses if possible. The Bureau of Foreign and Domestic Commerce is paying special attention to this phase of foreign trade development, and is bringing to the attention of investors opportunities to place capital in foreign countries and is furnishing available basic data for the guidance of the investor.

The lack of assistants trained in the technique of foreign trade and the absence of courses of instruction in the subject have been a handicap to many manufacturers who have been endeavoring to build up a foreign department. Costly and annoying mistakes and delays have often resulted from the errors of omission and commission of employes who have not been trained in the principles that are fundamental to business with foreign countries. In order to remedy this the Federal Board for Vocational Education has outlined a series of courses on foreign trade and shipping to meet the needs of teachers who may be called upon to give instruction on foreign trade vocations. One bulletin that has been issued contains outlines of short unit courses on selling methods and practice, the mechanism of foreign trade, exchange credit and banking, ocean transportation, marine insurance, trade routes, foreign tariffs and commercial policies. Specialized courses dealing with selected commercial areas are being developed for the use of students who have mastered the technique and who have surveyed the condition of commerce as a whole. In this work the Board for Vocational Education is working in close coöperation with the other agencies of the government that are interested in the development of foreign trade.

The Problem of Government Control

By BURWELL S. CUTLER

Director, Bureau of Foreign and Domestic Commerce
and

LOUIS DOMERATZKY

Tariff Expert, Bureau of Foreign and Domestic Commerce

AMONG the numerous problems comprised within the rather hackneyed term of "economic reconstruction," one of the most difficult is presented by the liquidation of Government control in business. The task is not confined merely to the abolition of certain war boards or the disposal of Government supplies acquired for war purposes, but involves a revaluation of the political theory of Government control in the light of war experience. While the political aspect of the problem has not as yet attained in the United States the importance attached to it in a country like Great Britain, for instance, there are strong indications that some of its phases may play a considerable part in the political developments of the next few years, and we may therefore regard a discussion of the problem as decidedly timely. The following two informal summaries by the director and the tariff expert of the Bureau of Foreign and Domestic Commerce, of the Department of Commerce, dealing with Government control in Great Britain and in the United States, may prove of some value in the discussion of the subject.

Government Control in the United States

By BURWELL S. CUTLER

The American Government control of commerce during the war has followed the British policy and procedure closely. In fact it is thought by many to have been a somewhat amateurish imitation wherein it followed the procedure alone, to somewhat unsophisticated extremes, without being founded on the keenly calculated aims of the British elders. For this there is, perhaps, excuse enough found in the prior establishment of a British block-

ade that allowed little or no variation in our freedom with foreign nations, since harmony with the British was to be effected above all else.

From stringent regulations on enemy trading we passed through one paralyzing prohibition after another in the field of international finance, commerce and transportation until, international possibilities being quite exhausted, we laid eager hands upon our domestic utilities with all the zest of a youngster over his first real steam engine.

Where the British laid down rules to serve the set purpose of withholding from the enemy all outside supplies of food, munitions and credit and at the same time permitted exceptions where their own supplies and trade were benefited without comfort to the enemy, the American embargo regulations were rigorously upheld on every occasion by their administrators like priests defending a temple; a policy of enlightened self-interest for ourselves and "war associates" had no standing beside a determination to defend the rule for its own beauty. So far as may be seen now, mere compliance with the British physical blockade against entrance of fats into Germany would have been sufficient to create the only economic strain which Germany admits as being decisive.

When the collapse came she had a fair abundance of everything she most needed except rubber and edible fats and lubricating oil—to which England had allowed her no access up to March, 1917, except when we forced Britain's hand in the way of trade.

Our most effective work was the elimination of pro-German or Austrian firms in South America, where there are left today few substantial merchants who prefer to handle American goods. The native and British houses there prefer merchandise from, and business relations with, other nationalities.

EMBARGO POWERS

The fundamental principles underlying the embargo power delegated by Congress to the President were twofold: conservation of natural resources so that they might be devoted wholly to military purposes, and prohibition on enemy trading. It is obvious that almost any set of regulations could be promulgated in compliance with those two principles since the extent to which

they could be administered was not limited by Congress or by the President who in turn had delegated the power to the War Trade Board.

The diversion of home industry into channels of army and navy supplies was splendidly done by the War Industries Board, taking into account the want of direct power which the Board suffered. It is true that it could supplicate the President any time to commandeer an intractable business concern, exactly as the army and navy did in effect rather often. But as a general thing the Board accomplished a unification of industrial and military purposes by the simple power of moral suasion. The business executives of the country responded fervidly without calling from Congress legislative compulsion such as the British Orders in Council. Those British Orders of 1914-1917 had given to the Prime Minister power to do whatever his Cabinet wished with every factory and utility in the United Kingdom.

Our board helped, as business advisers, to determine contracts, prices, shipping priorities, etc., wherever Government business was concerned. Its advice was followed wherever and whenever the army or the navy chose, the attitude of both Departments being good-natured even when most self-reliant.

FINANCE AND TRANSPORTATION

Perhaps the Treasury had the more difficult task of all, in so far as it tried first to maintain the abnormal gold reserve of the country and simultaneously to force a parity of exchange with other countries. That department was called upon to actuate through the War Trade Board an embargo on monetary metals and credits to the single end of conservation; it had no part in the policy of enemy trade exclusion, although its advice was frequently required. It is not hard to perceive that the Treasury Department was frequently beset by the urgency of releasing gold from this country in exchange for much needed imports, because certain nations to the south of us demanded gold, and gold only, as a return for raw materials which could not be secured from any other part of the world. Altogether, the Treasury was subject to more conflicting obligations than any other department.

The Railroad Administration did not take over control before it was amply demonstrated that habits of competition between

the different systems precluded any chance of unified action. Moreover, they sorely needed an increase of traffic rates beyond what the public would tolerate if decreed by private management. As soon, however, as the Government assumed responsibility the railroad employees pounded the Administration so hard for wage increases and privileges theretofore denied that there was no escape from them, unless a general strike was welcome. We now have Government control of privately owned property, with all the confusion inherent in such a contrariety.

As for our merchant marine; that is owned outright by the Government and consequently its costs and benefits are borne by the entire people through the process of federal taxation. Its delinquencies, if any develop, are visited upon every taxpayer and not exclusively on the investors who put their money into enterprises which they thought would provide them with regular income free from the risk of political exigency.

We have already indicated the forces which resulted in putting rail and ocean transportation into the hands of the Government, and these are, namely, the necessity for higher traffic rates (passenger and freight) and the necessity for an increased wage scale. Neither of these sweeping changes could have been brought about with the consent of the public so long as private management could be held responsible. In other words, the Government was palpably above any criticism on the grounds of selfish profit. The temporary seizure of the cable and telegraph lines is also based on similar considerations, but these would not have been effective in normal times, and the properties were taken over with the express intention of turning them back to private administration as soon as national affairs became sensibly normal.

THE FUTURE

We shall not judge the advisability of a permanent Government control solely on the ground of experience in this country up to date, but we can all see clearly enough the advantages and disadvantages of Government ownership of public utilities as a permanent thing. That in a general way a government would run them for the benefit of the greatest number of people and never for the purpose of unreasonable profit or stock jobbing is conceded by us all. We will even admit that an excess of competition by parallel

lines and activities resulting in a too great overhead cost of operation, can be eliminated by the authority of the Government. It is likewise possible to believe that strikes and all riotous disturbances would be difficult of accomplishment so long as the Government is in charge and therefore obliged to oppose its armed authority for the protection of the properties involved. And yet, on the other hand, we are more than likely to lose under Government administration the exercise of ingenuity and incentive which individuals brought to bear upon our vast railroad systems in the days of their creation. The most effective public utilities are invariably those which enjoy constant improvement under the spur of ambitious individuals seeking to improve property committed to their personal care. If our lines of communication by wire or by rail or by boat become out-and-out Government-controlled properties, it is inevitable that the executives in charge and the operative force will take on a political character. As soon as that condition is well established we might see as the result of sporadic political upheavals in one part or another of the country a constant change of railroad people in office and the selection of them dictated primarily by political preference. In this process a certain section of railroad or telegraph lines might be taken over bodily by a mob organization, such as the I. W. W. or some other radical group in temporary power, and the entire system would be terribly handicapped, if not paralyzed.

When one puts into parallel columns the advantages and disadvantages of permanent public administration over privately owned properties in these United States and thus creates an account with credit and debit, the balance on the debit side is so unmistakably plain that an impartial man, with his feet firmly planted on the solid ground of historical fact cannot support the idea;—or at least he will say “let us defer the highly altruistic plan until we know what kind of a Government or polity the masses are determined to give us.” For no Government can successfully escape from the logical consequences of its own policy if they turn out to be evil, nor can it combat them in the day of repentance.

Government Control in Great Britain

By LOUIS DOMERATZKY

While we may leave to the future historian the dangerous task of determining the extent to which economic factors were responsible for the world war, we do not have to wait for the verdict of history to appraise the importance of such factors in carrying on the war. Likewise we are safe in assuming that the war will bring about revolutionary changes in the economic life of most of the countries, neutral as well as belligerent. Not only has the war affected deeply the business life of the separate countries, but it has also served to bring about a degree of international control and pooling of resources that would have been regarded as inconceivable for probably half a century under normal development.

Perhaps the most striking development has been the overwhelming control exercised by the individual State over the principal phases of economic life. In order to increase production so as to keep the tremendous war machine going the State had to step in and to counteract all the subversive instincts that were interfering with the desired end. In assuming control over production the State was compelled in many instances to guarantee to labor remunerative wages sufficient to cover, or to exceed, the swollen cost of living and even to provide housing and transportation facilities where they were inadequate for high-speed production. There seemed no escape from the duty to limit profits, to fix maximum prices, to allocate materials, to appropriate products, to interfere in every ingenious way with the basic laws of supply and demand, when they appeared inadequate to a concentrated effort in a given direction. And the further the State went into the field of production and distribution the more functions it was forced to take over or control, since a radical change in the management of one plant of industry was found to affect correlated plants or industries. Thus State control, or interference as it is sometimes called by its opponents, was expanding at a rapid rate when the war came to a sudden end, leaving behind it the enormous task commonly referred to as economic reconstruction.

MEANING OF "ECONOMIC RECONSTRUCTION"

The significance attached to the term "economic reconstruction" differs very widely according to the political, economic and social views of the persons by whom it is used. To some it may mean a revolutionary change in the relations between the State and the individual, the upbuilding of an entirely new social structure in which the State shall assume paternal authority over the numerous business and social activities which have not been performed adequately under an ultra-free régime. To others it means simply that the State shall relinquish its new functions assumed during the war as quickly as possible and with the least disturbance to the economic life as conducted on a pre-war basis. Between these two extremes there are naturally numerous gradations. The crux of the problem is to decide just what functions the State should discard or what should be retained and developed to their logical conclusions.

The extreme opponents of Government control who assume that the progress made in that direction during the war will be entirely obliterated and will have no bearing on the after-the-war politics are probably just as far removed from a realization of the real trend as their visionary opponents who construe the war experience as a great step towards the realization of the Coöperative Commonwealth. It is hardly necessary to point out that the final outcome will be determined by political factors at least as much as by economic. In any event it is quite clear from the legislative measures already adopted by some of the belligerent governments that they will retain authority over the distribution of raw materials until monopolies in materials and credits are no longer possible.

NATURE AND EXTENT OF BRITISH CONTROL

Before entering upon a discussion of the merits of Government control in general it may be well to review briefly the principal measures adopted by Great Britain and thus get an idea of the extent and character of control achieved during the war, for this alone will measure the distance we must retrace our way to the pre-war "free economy."

Great Britain fixes our attention first, not merely on account of her dominant financial position among the belligerent coun-

tries of Europe, but also because, strange to say, she has gone further in the direction of State control than the others, always excepting chaotic Russia and Batavia; also she has done this in the face of her traditional commitment to commercial freedom and the proverbial individualism of her economic life. The experience of Great Britain is also of particular importance to us because it is apt to influence our own policy to a far greater extent than the example of the Teutonic countries, since their tendency towards extension of State control had been growing apace for some time prior to the outbreak of the war, and it may be regarded as a natural development of intense centralization in politics. Not so with Britain. Whether her policy may be attributed to a better appreciation of the underlying economic factors of the war and the magnitude of her financial liability to the Allies, or whether it was wholly a result of a socialistic trend unduly accelerated by the national defense, we do not feel ready to decide. There is no doubt, however, about the permanent penetration of State control into the economic fabric of that country.

Adverse opinions regarding the desirability or success of Government control under normal conditions should not blind us to the fact that certain production problems, especially those relating to labor, could not have been adjusted without the assumption by the State of the economic and social sequences of such settlements.

It is assumed by many that this attitude of the State will also have to be maintained during the reconstruction period in order to avoid serious labor and fiscal disturbances. The concessions of labor made by the State in certain industries and services, as in railway transportation, for instance, will probably make a prompt return to private ownership of those utilities very difficult, if not impossible; and we may conclude from the recently introduced bill for the creation of a Ministry of Ways and Communications that the nationalization of the railways has practically been decided upon. In other cases, like the exploitation of the Persian oil fields and the dye industry, the participation of the State has been so conspicuous that it is doubted whether from a political standpoint the Government could step entirely out of those purely industrial enterprises without thorough preparation for the event.

In a broad way, then, Government control in Great Britain extended to all phases of economic life, but was particularly concentrated on public utilities, production of ammunition and other war supplies, including essential commodities for civilian use, especially foodstuffs. Now let us examine briefly the methods of procedure adopted by the British Government in its various forms of control.

RAILWAYS, MUNITIONS AND COAL

On account of their pivotal character in war operations the railways were taken over by the Government on the day following the declaration of war, under the Regulation of Forces Act (1871). The operation of the lines was placed in charge of the Railway Executives Committee of General Managers, under the general control of the Board of Trade, and the general basis of compensation was a guarantee by the Government of the profits obtained during the period immediately preceding the outbreak of the war. Early in 1915 the Government was confronted with the task of dealing with the demand of the railway unions for increased wages to cover the increased cost of living. The Government granted a substantial part of the increase asked for and assumed three-fourths of the cost involved. The concession was regarded as a great victory by the unions and was undoubtedly construed as an indication of the policy to be adopted in the future in dealing with the railway unions. Further increases in the war bonuses to the railway employees was made in September, 1915, September, 1916 and April, 1917, and a far-reaching concession in regard to the continuation of the war wages to the end of 1919 has just been granted by the Government. In accordance with the promises made during the last parliamentary campaign the Government has just introduced a bill for the creation of a Ministry of Ways and Communications, with vast powers for the control of all forms of transportation and communication.

The control or ownership of munition plants by the governments of the belligerent countries was so general that it could hardly be regarded as a conscious political reform in any of the countries. Owing to the shortage of labor and equipment and to industrial unrest the Government took a decisive hand in the distribution of labor, also assuming authority in prevention or

settlement of strikes, adjustment of wages, etc. The Defense of the Realm Act and the Munitions of War Act enabled the Government to take over the control of the private plants engaged in the production of munitions and to limit their profits, thereby removing one of the principal causes of labor agitation, namely demand for a greater share of the apparent profits. There was also a provision for the protection of trade union rules after the war and for a system of "leaving certificates" intended to prevent the migration of labor from munition industries. While these measures were so closely connected with the actual conduct of the war that they could hardly be regarded as examples of deliberate paternalism, nevertheless, some of the principles involved, notably the limitation on profits, might be retained as serviceable for the period of reconstruction; the final disposal of the Government-owned munition plants may give rise to a demand for their conversion to peace uses under the Government auspices.

A decrease in the output of coal made it necessary for the Government at first to restrict the exportation and the domestic consumption, and, later on, largely as a result of the labor disturbances in South Wales, to impose labor adjustments and price fixing. A further threat of labor troubles in 1916 compelled the Government to take possession of the South Wales mines, following which Orders-in-Council of February 22, 1917, authorized Government control over the entire coal-mining industry, which was placed in charge of a new department in the Board of Trade, under the Controller of Coal Mines.

SHIPPING, LEATHER AND TEXTILES

While the requisition of shipping was primarily a measure for carrying on the war, it also had the very important economic function of preventing an undue rise in import freight rates and consequently in the cost of living, Great Britain being almost wholly dependent on imported foodstuffs. Thus a very considerable part of British tonnage was commandeered by Royal Proclamation of August 3, 1914, and a board was set up to adjust the claims of the ship-owners. The Board of Arbitration soon assumed also the function of drawing up approximate monthly rates, which gradually developed into the so-called "blue-book" rates for requisitioned vessels and were considerably below the

market rates. The Government also adopted a system of risk insurance for the vessels not requisitioned. In view of the conspicuous part played by the high cost of living in labor disturbances the Government moved in this way to keep at a reasonable level the cost of imported foodstuffs, since an unrestricted rise in freight rates and no reservation of space for the transportation of foodstuffs had been working to the opposite effect.

The importance of leather and textile fibers for war equipment and the violent rise in prices occasioned by the war demands as well as by the high freight costs induced the British Government to take on the purchase of raw materials in the British Dominions and South America, and also to determine priorities in case of merely civilian demands. Even the production hours of factories using these materials were curtailed in the interest of conservation. It may be said that during the greater part of the war period the middleman was altogether eliminated from the textile and leather industries, in so far as the free distribution of raw material was concerned.

FOODSTUFFS

Since, however, for the army and for the civilian population an adequate supply of foodstuffs had become the most serious problem, the British Government concentrated its attention on a double domestic policy as follows: (1) the assurance of adequate supplies by boat from foreign sources, and (2) encouragement of domestic production by means of guaranteed prices, distribution of tractors, seeds, fertilizer, etc., and by encouragement of small farm holdings.

The first task was to prevent an undue rise in the prices of staple foodstuffs, the importation of which was greatly affected by the curtailment of tonnage. Thus we find that maximum prices for sugar, butter, cheese and bacon were fixed by the Board of Trade early in the war. With the sugar supply from the Central Powers cut off there was a sharp rise in the price and a Royal Commission was appointed in September, 1914, to investigate the situation, to purchase and distribute sugar, and maintain the supply. The Government became the sole importer of sugar and soon took control of the refineries. By fixing the refiners' profit it controlled the price of the refined product. On several occasions the

Royal Commission on Sugar Supply raised the maximum prices for the purpose of reducing consumption, but with comparatively little effect.

In its endeavor to assure a sufficient supply of meat the British Government started by encouraging the increase in the domestic supply. Later on it took over the control of imported meat, at first from Australia through price control by the Dominion Government, and then from the River Plata through requisition of refrigerating space in British steamers trading with Argentina and Uruguay. In this way the Government managed to buy on comparatively advantageous terms for the British as well as the Allied armies. Later on it was found necessary to fix maximum prices for domestic meat. The British Government maintained in the United States an agency for the purchase of bacon, ham, and lard and fixed the middlemen's profits on those commodities.

The methods adopted by the British Government for the control of wheat which was found necessary on account of inflated prices and evidences of profiteering in the milling industry, were more or less similar to those adopted in the case of importers of sugar. The Grain Supplies Committee was appointed for the purpose of procuring large supplies in the United States and Argentina. The Indian wheat crop was controlled through importers appointed as Government agents.

While the State control of the food supply was perhaps more thorough than in any other direction, it is the one form of control least likely to endure as a permanent policy. The Government undoubtedly succeeded in many cases in preventing an excessive rise in prices and profiteering, but it may be doubted whether anything short of a national emergency could induce the people to submit further to a multitude of annoying prohibitions. This, however, does not apply to the measures adopted by the Government for the encouragement of British agriculture, some of which, like the guaranteed price of wheat, will remain in effect for several years after the conclusion of peace and will undoubtedly figure prominently in future political discussions.

With the increase in the difficulties of ocean transportation, the question of increasing the domestic production of foodstuffs and restoring British agriculture came to the fore. Some of the

recommendations of the special committee appointed in 1915 to investigate the state of British agriculture were carried into effect by the Ministry of Agriculture, beginning with an agricultural census and following it up with measures for increasing production from small holdings, providing fertilizer and agricultural machinery and especially tractors, which were acquired in large quantities by the Agricultural Machinery Branch of the Ministry of Agriculture and loaned outright to farmers who were not in a position to buy them. On February 23, 1917, Prime Minister Lloyd George announced the adoption of the most direct measure of encouragement to domestic agriculture, i.e., a system of guaranteed prices for grain, intended to encourage the cultivation of pasture land and to increase the grain acreage. A schedule of guaranteed prices for six years, beginning with 1917 and subject to revision after the expiration of a four-year period was finally embodied in the Corn Production Act, which also contains the revolutionary provision for a minimum weekly wage of twenty-five shillings for agricultural laborers.

SUMMARY

In summing up the British experience with Government control during the war, it may be said that it has entered practically every fundamental part of economic life, that in spite of some of its failures it has been an exceedingly effective factor in the successful conduct of the war, although very severely criticized, especially by the abolished middlemen, and that there is undoubtedly going to be a strong demand, especially on the part of the labor and the socialist element, for the retention of some forms of Government control over certain industries and transportation. The extent to which the British Government will retain control or ownership will probably depend largely on the political strength of the various parties concerned in the issue.

Trade and a League of Nations or Economic Internationalism

By J. RUSSELL SMITH

Professor of Industry, University of Pennsylvania

SOME years ago there was an outbreak of typhoid fever in a Pennsylvania town. The hospitals quickly filled with patients, and still they came. Nurses assembled and gave to the afflicted the usual care, including ice bags on their heads, but still new cases came, and panic seized the place. Finally a sanitarian went up-stream and mended a broken pipe which had been discharging germ-laden sewage into the town water supply. The epidemic ended. Its cause had been removed.

The Hague conferences may be likened to parties of nurses with ice bags trying to allay a fever whose cause they did not touch. This is no impeachment of the great and able men who worked so hard in these conferences. The causes of war lie deeper than broken water pipes, and in the stage in which the world then found itself, the various jealous, rival governments would not let the Hague conferences touch war causes. For this reason they failed to touch the problem, as the Great War has shown so cruelly.

The present League of Nations will be no more effective in preventing future war than were these Hague conferences unless it takes steps to remove the temptation to war. Man says he is a thinking animal, but he does not think much. His feelings make him act as often as his thoughts, perhaps oftener. If things keep happening that provoke the war spirit and people are made to think war, its terrible teeth will again crunch us, despite any League of Nations formed at this time. The *spirit* of men during the next twenty-five years decides the fate of any League of Nations. The league must remove some of the causes of war. Unfortunately it cannot remove them all.

The causes of war may be condensed to three:

1. Property—the desire of actual material possessions—lands, colonies, concessions, markets, trade.

2. Preferment—the love of dominion—the sense of greatness and power, the thing which makes men strive for honors and place, the thing to which the writer

of the allegory of the Garden of Eden referred when he had Jehovah give to Adam and Eve *dominion* over everything in the Garden as well as *possession* of all the property.

3. Group Consciousness—the desire for our own particularism and the desire to keep it and spread it, because man is generally sure that his things are best. The Americans wish to continue to be Americans; the English, the French, the Germans, the Japanese, the Hottentots, and all other peoples share this same feeling with regard to their culture (*kultur*). Moreover, each of them thinks other peoples should accept its viewpoint, institutions and customs.

These three, the desire of possession, the desire of dominion, the desire for our own particularism and the desire to spread it, have repeatedly cursed the earth and given to it the high spots of history, at least the high spots of history as we have taught it for a few decades—the fall of Nebuchadnezzar, the outbreak of the Greeks under Alexander, the creation of the Roman Empire, its crushing by waves of Goths, Vandals and Huns, the Saracen sweep, the arrival of the Turk in Eastern Europe, the conquests of Prussia in Central Europe, and perhaps greatest of all, the brushing aside of the Indian by the European races that took America for their home. The most recent of this series was the attempted world domination by Germany.

Most of the world's wars had been smaller in effort and result than the great world upheavals above mentioned, but it is the same three forces that have made them kill the man, burn his home and carry his children away as slaves.

We must not for a moment forget that these war forces are parts of permanent and enduring human nature, like the instinct to eat and to possess individual property. The question is—can society be organized in such a way that these rational appetites can function normally in the world society as the personal appetites for food and property function normally in an ordered community, while they are so destructive in an unordered community? It seems plain that we must remove some of the provoking conditions. Otherwise, these appetites, repressed too much, will again take maddened humanity on the spree that has been its misfortune in so many past times.

How can we reduce these temptations to war? This article deals with the economic causes of war, group one above mentioned. How do these causes present themselves as specific problems? They may be classified as follows:

- A. Interference with the trade of other nations through transit restrictions.
- B. The exclusion of people who wish to emigrate.
- C. Concessions for foreign investment.
- D. Interference with trade by tariffs.
- E. Most favored nation clauses.

A. TRANSIT TRADE

The principle of self-determination of peoples and the admission of respectable peoples into the family of nations carries with it the right of access to the public road, just as any citizen anywhere in the United States has right-of-way, after reasonable payment, over any other man's land to the public road. Thus, any inland nationality has the right of untaxed access to the public road of the world, the sea, the highway of the nations.

This is simple. A League of Nations should in its inception be able to remove this cause. There is no good reason why the Dutch should impede, by tax or any other restriction, the free access of ships to the great Belgian port of Antwerp because, by one of the accidents of an age of brigandage which we hope is passing, a little corner of Holland reaches across the river Scheldt, the outlet of Antwerp. The nation that wishes to tax the trade of any other nation whose trade must pass that way is suffering the temptation of the highwayman, and should have no more right to that kind of revenue than the highwayman has to his revenue.

We have a most happy illustration of the proper working of this matter of access in the trade of the United States and Canada, which alternately flows from both countries, down the St. Lawrence in summer, and through the ports of New York, Boston and other Atlantic cities in the winter. We have, indeed, a keen and wholesome rivalry, the United States spending a hundred million dollars to make an Erie Canal that would tempt the Canadian trade to New York, while Canada builds canals to tempt American trade to Montreal. Similarly Germany should be served, by two rivals striving to serve her cheaply and effectively: Holland with her port of Amsterdam, Belgium with her port of Antwerp and her canals reaching to the Rhine.

The trouble in connection with this matter of the trade is that it has been tangled up with its abuses; namely, transit dues or their possibility, and the preparation for war. A peaceful Germany has no more to fear from the transit of her trade through

Holland and Belgium than we have to fear in the transit of our millions of dollars' worth of trade every summer down the St. Lawrence.

B. EXCLUSION OF PEOPLES

This is almost like driving people out of a region. It is the greatest menace, the fundamental land question, the temptation to war which we can only hope to mitigate. We cannot hope to end it. Land hunger is the greatest of all causes of war and it will continue as long as some peoples have much more land per person than others. In June, 1914, Isaiah Bowman, Professor of Geography in Yale, pointed out to a class studying the geography of Europe that the population on the French side of the Franco-German boundary was small and stationary, that the population on the German side of it was large and growing, and "as sure as you live, there will be war across that boundary some day from the sheer breaking of the human dam on the populous side of the line." Dr. Bowman was not speaking as a student of politics. He was speaking as a student of geography and of human nature, and he was speaking of a temptation to war which the League of Nations makes no pretense at removing. Instead, the League of Nations, in the very essence of its task, hopes rather to fasten this temptation continually upon us. Every nation is to have its home, the chance to develop its own dear particularism. There shall be China for the Chinese, Poland for the Poles, England for the English, Armenia for the Armenians, Japan for the Japanese, Australia for Australians, America for the Americans. Herein lies the dynamite. The best we can hope to do is to keep fire away from it. It is dynamite, and it will be dynamite for indefinite generations, as long indeed as one people has much greater opportunity per man in its territory than a neighboring people has. At the present time any people in the world has become a "neighboring people."

Taking a long view, we may perhaps say that the greatest menace to permanent world peace lies on the Pacific, where we see the love of racial particularism causing the white peoples of the United States, British Columbia and Australia to exclude the Chinese. This is done for the most natural of reasons. With their great numbers, their simpler standard of living, their low wages, their

terrible diligence, the Chinese have shown that they can come to California and buy the whole of it, convert it into an outpost of Mongolia which may spread no one knows how far. The American society cannot stand side by side with the Chinese any more than Indian society could stand side by side with the eighteenth century colonist. So we stop the Chinese—while they are weak, in the military sense.

The thing that has smashed up the world repeatedly from Nebuchadnezzar to William II is still with us—land hunger, and it probably can be sharper across that narrowing Pacific with those hundreds of millions of hungry Chinese crowding their land to the water's edge, and those mere handfuls of white men in Australia, British Columbia, and California with more land by far than they can use even on Western standards, almost a kingdom apiece, and still keeping the Chinaman out. And the very essence of racial individuality is that California shall be for the Californians, Australia for the Australians, British Columbia for the British Columbians, and the Chinese all piled up and no place to go.

The tendency toward avalanche is stronger here than it was across the German boundary, but the Chinaman is not at present organized, trained, disciplined in war, taught by generations of war talk, or tempted by the lust of world dominion. Due solely to our interference with him, he is making a good start in the development of the Western military system, and we must decide whether we are going to make him keep on by imposing on him because he is unorganized. Perhaps he must continue to prepare for war because of the fundamental land hunger. Perhaps he can be content to stay at home with his hunger for the ownership of these lands if he can get their produce through free and unrestricted international trade, and through free, equal and safe opportunities to invest in their undeveloped resources.

C. CONCESSIONS FOR FOREIGN INVESTMENT

Many economists say that the real, deep, underlying cause of the recent great war was the struggle for concessions, for the privilege of foreign investment. They say that England and Germany had developed their own home resources quite fully, that they had surplus capital and they were ready for more fields to develop, provided higher interest rates could be secured, and

that here was the real cause of the rivalry that finally produced the explosion.

The well-known rivalry of the powers, particularly England and Germany, for the privilege of developing railroads, mines, irrigation works and other enterprises between Constantinople, Bagdad and the Persian Gulf is a very well-known sore point in history, and is a good example pointing to the force of the factor as a war maker. It is a kind of corollary to the land hunger idea—really a modernized form of it. Through the stocks of a corporation we bring the profits of the foreign land home to ourselves. Thus we may own it as property (economically) without the necessity of owning it as a government (politically), although the concession process is a common way of colony making. The concession for foreign investment is one of the things which the League of Nations must control if it expects to endure.

During the present administration our State Department has set two splendid examples for the management of this question. In 1913 the financiers of six nations, five European and the United States, arranged a so-called six-power loan to China for the building of railroads and the development of other industries. Our State Department at Washington examined the conditions of this loan and told the American financiers who proposed to advance the money that they would not help them out of any difficulties with the Chinese government arising from this contract, because the administration thought the conditions of the loan too hard; in other words, that they were not fair, that they were dishonorable; that we, the government, would not be a party to it. The American financial interests were very indignant and said many hard things about the government, but they did not take a part in the loan.

In 1918 another group of American financiers brought to the State Department another financial agreement with Chinese interests. This agreement was carefully examined by the State Department, which gave its O. K. The loan was made. The idea is that the assistance of the government can be the more certainly expected in case the Chinese treat the investors in a way that they think is not fair.

We may call this a case of high class dollar-diplomacy. The name, dollar-diplomacy, has for some time been given to foreign

relations in which the diplomatic side of a government aided the investing and business enterprises of its citizens abroad, rather than leaving those matters entirely with the governments and peoples of the foreign countries. There are many good reasons why the dollar-diplomacy must in some way continue. There are even more good reasons why it must be subject to control by some set of rules made by persons with a sense of justice rather than a sense of greed. The foreign concession today is one of the greatest opportunities open to man for the exercise of greed with little check. There is almost no limit to the concessions that a group of promoters could get from a so-called government in Siam, Haiti, Nicaragua, or Venezuela. In Haiti they have often had two or three revolutions a year, with two or three different adventurers in charge of the government for a few months. The record of these men would usually make them criminals in the United States or any European country. Some of these cut-throats, with all the machinery and sanctity of a fully established government, could issue concessions involving the ownership of lands, the development of mines, the monopoly of street railways, water works, gas works, the whole list of so-called public service enterprises. He could take his first payment (or his bribe money) and flee, and live abroad in comfort the rest of his days as many have done, leaving behind him a contract in the name of government which, if backed by the warships of the nation whose subjects got the concession from the cutthroat, might be worth ten or a hundred million dollars, and make semi-slavery for generations of men.

These opportunities will continue. The Monroe Doctrine will probably leave tropic America nominally free, so that for a long time wonderful concessions may be secured under conditions that bear some unfortunate resemblance to those just described as possibly occurring in Haiti.

We are entering on a new epoch, the epoch of syndicated exploitation, which is about to succeed the era of merely corporate exploitation of resources. Strong groups of capitalists in England, France, Germany and the United States are organizing for the export trade and for foreign investment in a way that promises to be almost imperial in its power. Our congress recently passed the Webb-Pomerene bill which deliberately authorizes Americans

to form organizations, to do abroad in the foreign trade things which we have forbidden at home, because we do not think them proper and fair here. To match this, the European export organizations are of a scope and power never before seen.

We can almost think of them as little nations, except that they are international in their field of operation and are strangely potent in their equipment to stir up trouble between the nations. Look for a moment at one of these combinations. In its many associated corporations it represents steel mills and several kinds of factories, railroads, an export firm, a dock company, a warehouse company, a steamship line, and in countries beyond the Equator, import warehouses, import companies in several different ports, a great series of banking houses, cattle ranches, lumber companies. To make profit on the whole, it may easily operate some of its branches at a loss. It may do banking under such favorable terms that no other bank can be established except that it too shall be operated at a loss; the steamship line may be operated at a loss to keep out other steamship lines; yet the whole is making profit. Altogether it may be considered as a wonderful example of coöperation on its operative side, but an amazing engine of competition when it comes into strife for the possession of markets, franchises, and land concessions abroad.

The old East India Company seems to be coming back to life with three-fold power. This company used to monopolize the trade of kingdoms. It also governed and made war. It was indeed a kind of commercial-military-empire company. These new foreign trade and exploitation syndicates will control far more actual resources than the old East India Company. This does not look toward peace. This is the strong navy party. They want it to back up their claims when they come into conflict with rivals or so-called governments abroad. The morning papers of this, the 31st of March, report conspicuously a splendid example. The Mexican government admits granting to certain Japanese interests a large tract of land in lower California. For many years the same tract of land had been owned by a group of American capitalists, but the Mexican government claims that their concession ended in 1917. Perhaps the Mexican government was guilty of confiscation in the ending of that concession in 1917, perhaps it was not. Perhaps the American capitalists who

originally got the concession were guilty of real violation of good business ethics, perhaps they were not. Perhaps the Japanese who got the concession were guilty of the violation of good business ethics, perhaps they were not. But in any case, the situation is one in which we can easily see the possibility of three kinds of trouble:

First, between the United States and Mexico.

Second, between Japan and Mexico.

Third, between the United States and Japan.

If the American capitalists who may claim that their land was confiscated are to get any justice, they must under present conditions get it from the Mexican people, through the Mexican government, with the aid of the United States government. It is perfectly natural that they should be a strong navy party, a strong foreign policy party, quite natural also is the claim that foreign capitalists operate both governments and revolutions in weak countries. We must remove the settlement of this kind of claims from the national field to the League of Nations. We cannot risk a recurrence every three months of such causes of friction, particularly when we consider the size and power of manufacturing-export-investment organizations as they will probably be operating ten, twenty or thirty years hence, when the stupendous plans of the present have been worked out to use the appalling machinery with which man has strengthened his hand.

This is peculiarly dangerous because we must not forget that some one controls even in a democracy. The control of government policy goes most naturally to those groups that can most easily organize. The manufacturers, the traders, the financiers, are the natural masters of this art. This means a growing national policy for "safe" foreign markets, best secured of course in countries which "we control."

The mandatory idea in the League of Nations has great possibilities here. Under the mandatory idea, Australia, acting as the agent of the League of Nations, may govern what has been German New Guinea, leaving its trade, commerce and investment opportunities equally open to all the peoples of the world. The idea needs to be carried further. The League of Nations should control and protect international investments. If the citizens of England felt that they had a grievance against a dictator in Haiti,

who after having won a successful civil war, proceeded to demand forced loans from the railway company above mentioned, as they have a habit of doing, the old system was for the British (French, German, etc.), wherever they could do it, to send in their warships, bombard, blockade, or take other such steps as were necessary to bring what they, the intervening government, thought was a fair settlement. By this means have all empires grown, because governments found themselves at the end of such interventions with their hands on land which they have not yet seen fit to let go.

It would be much better if the League of Nations' Court of Claims should hear the case with a speed resembling a police court, pass its opinion, and have it enforced by the League of Nations, either directly or through a mandatory. Nothing need be done more than boycott the offending country by all the countries of the world. No military power whatever would be necessary. Not a shot need be fired, but the Haitian dictator would of necessity mete out fair treatment to the foreign concessionaires—and what is of equal importance, the foreign concessionaires would also treat the Haitians fairly.

Such a policy on the part of the League of Nations would almost certainly mean that the League must prescribe conditions governing concessions between the people of one country and those of another. Concessions would doubtless be examined by the league just as the Chinese concessions of 1913 and 1918 were examined by the American State Department, and approval given or withheld. If the approval was not given, the support of the league could not be had, and the dictators of Haiti would in all probability feel themselves free to make exactions, so that in a short time we might expect all international concessions to be registered with the League of Nations before anyone would be willing to risk money back of such an investment.

If the League of Nations is able to do anything, it seems reasonable to think it could do this with ease and thus remove two things: the temptations of the big nations to make war on the little nations; and second, reduce the rivalries between the big nations and thus greatly reduce the desire for war. It would be maintaining a real open-door policy.

With such a policy removing land monopoly, we would enter upon a new period of plenty. As a matter of fact, the resources of

the world have scarcely been touched. This is especially true of the tropics, the largest of the zones, and there is enough of untilled land, undug mineral, uncut forest, uncropped pasture, to absorb the capital of Europe and America for many decades to come, and to build up a trade many times as great as that of the present, with large exports, and still richer imports, for all.

This offers great opportunity for quick increase in wealth and comfort in the temperate zone. The trouble with tropical development in the past has been, in addition to the climate, the lack of law and order which made two things: first, an extortionate exploitation in some cases, and a great insecurity in others. The above mentioned plan of insuring foreign investments against the chance of international friction will also do much to increase their financial security. These advantages in combination with open markets in the temperate zone, will give us a surprising increase in our much prized tropical produce, such as chocolate, rubber, sugar, spices, meat, bananas, tapioca, sago, and the many other desirable products of which a developed torrid zone might produce such stupendous quantities—enough for us all.

D. INTERFERENCE WITH TRADE BY TARIFFS

Free trade or war! That is a choice that faces the world sooner or later. We must of course go on as we are for a time, and changes must be made gradually, by evolution rather than revolution. If we insist in keeping out the persons of those who wish to emigrate, the avalanche *may* break, despite any alternative that one people can offer to another. If we insist on keeping out their goods as well as their persons, it is safe to say that the avalanche *will* break and again pour war over the world—a worse war ten times over than the last one. It is quite possible that a future war may take the form of the extermination of peoples by the gassing out of millions—clearing the land ready for the conquerors—Armenian massacres done more scientifically.

With land hunger permanently clamped upon us, we cannot expect fifteen or twenty strong, energetic and growing peoples to stay permanently at peace if such episodes as the following continually occur to raise friction, and make people wish to own a neighboring country so that they may trade with it. For ten years the United States freely imported Canadian produce, then

suddenly enacted a tariff that almost prohibited it. Mills closed, people lost their jobs, villages and towns declined. How did Canada feel? She felt sore, as did Germany when our McKinley tariff shut off her exports to this country. The Germans of course knew that if they had owned the United States their prosperity would not have been disturbed. Nations cannot keep on making each other think such thoughts and also keep the peace.

If we cannot win international free trade at a reasonably early date, we should give up the League of Nations idea and prepare for the continuation of wars in the future as one of the plagues of the earth, as past generations have looked forward to them.

1. FREE TRADE, LOCAL MINDEDNESS AND NATIONAL WEALTH. Every political economy proves that international free trade is the surest way for the people of the earth to enrich themselves. Yet the manufacturers of every country want a protective tariff, and almost every nation of the world has this policy in greater or less form. Why is this piece of truth, accepted by nearly all thoughtful men, contradicted by a world-loved practice of nearly all business men? There are three reasons: one is a mistake in theory, another a difference in point of view, and the third our inherent love of special favors.

The manufacturer who wants a tariff, wants it for his produce only, although he may adopt the plunder-bund idea and help others get it so that they may all have it. In its essence, however, the tariff is a local question, a kind of personal question—a clear financial advantage to the group favored by the tariff. On the contrary, free trade is a *national* question. Men think of themselves personally first and nationally last, if at all. If he thinks of *his industry*, a tariff is profitable to him. To anyone who will take the trouble to think nationally rather than locally, free trade can be seen to be an advantage. One of the difficulties in thinking nationally on matters of trade seems to arise from a peculiar inability on the part of the average mind to see the simple fact that trade consists in the exchange of goods. That statement seems so simple that we should expect every child to believe it, but the fact is that almost no nation believes it. Any manufacturer in almost any nation can make a crowd tremble by telling them of the danger that will come to them if we allow the import of produce made by “pauper labor,” the term being applied to the

peoples of nations who work for less wages. The next point he never seems to see, namely, how can we pay this pauper nation for its produce? There is only one way. We must pay them with other produce, the output of our own industries. But the unfortunate point is that the man who is talking about the "pauper labor" may not be able to compete under free trade. It might make him change his industry.

It is perfectly true in any tariff country that there are industries that cannot survive the competition of some other countries. The chief capital stock in political trade of the man running such an industry is that pet term "pauper labor." The facts are that their produce may be more cheaply produced in some other country, and paid for by the export of some other kind of article from their own country—that local question again—this time the shift of prosperity from one industry to another in the same country—from a wasteful industry to a sound industry. But it gives a real and genuine fear to all those who are engaged in the industry that cannot compete.

The people of the United States, with wages at two to five dollars per day, cannot import goods from China, with wages at twenty cents a day, without exporting something to pay for it. It is a national enrichment for us to buy the produce of what some call pauper labor, because we get goods we need and use, pay for them in other goods that we have, and, therefore, the import of goods stimulates the export of goods.¹ If one will take the trouble to think nationally, he will see that there is no escape from that sentence. The facts are that while the world is struggling to think internationally in terms of peace and war, perhaps the chiefest block of all in the way of advancement is the inability of the average man in America and elsewhere to think even nationally on the matter of foreign trade. He still thinks personally. He does business personally. Yet the greatest problem of his life

¹The above statement, of course, needs the modification that these conditions may be temporarily suspended by international borrowing and lending. Thus for the period of the war the United States developed an unheard of export trade because we postponed the receiving of imports. We took promises to pay. We sent England and France billions of dollars' worth of war supplies and took in their place billions of dollars' worth of promises—bonds, promises to pay money—which they can only obtain by sending goods at some future time, and now France is lamenting that she doesn't see how she can pay her debts if we adopt prohibition and therefore refuse to take wine, long one of her chief exports.

requires that he shall suddenly think nationally and also internationally.

2. THE POLICY OF PROTECTION. The protective tariff has two reasons for being that are recognized by economists, and three reasons that are recognized by the average citizen of the United States.

(a) To start and protect an infant industry.

(b) To prepare for war by giving a nation a great variety of industries necessary to supply an army.

(c) To raise wages in the country having the protective tariff.

Let us examine them in order.

(a) *Infant Industry*. It is often necessary for an industry to receive aid during the period of its start in a new country, and protective tariffs have started many such industries. This need will arise in the future. Fortunately it can be met in a better way, namely, a cash bounty. Thus, if we import fifty million dollars' worth of product A, and put a 20 per cent tariff on it, we tax the users of that product ten million dollars at the point of import, and perhaps twenty million dollars by the time this tariff element of the cost has been passed on through the percentages of profits of importer, jobber, wholesaler, and retailer. Thus, the 20 per cent tariff on the fifty million dollars' worth of imported commodity A adds twenty million dollars to the cost of living in the United States, when perhaps a million dollars paid as bounty to the founders of the industry would enable them to develop it to full technical development, and enable it to compete with foreign countries. If it cannot permanently compete, why have it? It will always be an expense to the nation, making things at a greater cost than they can be bought elsewhere.

(b) *Preparation for War*. We may need an expensive and costly industry if we keep the concept of national war. If we are preparing for war, the protective tariff may perhaps be a part of the general policy, although the bounty system will generally be found less expensive and therefore more effective. But the League of Nations, if it is of any value at all, will remove this necessity for industrial completeness as a preparation for war. It proposes two very definite and very vital measures in this direction:

(1) One is the manufacture of munitions by government, so that the Krupps and other munition makers will remove their evil presence from the politics of nations and the foreign policy of nations. Thus private industry will not have to be depended on for munitions.

(2) Economic Aid in War. If the League of Nations succeeds at all, the free trade nation will be better off than the protective tariff nation because it will be richer, and, therefore, more able to buy munitions and war supplies from the other nations of the world, which will rush to its assistance. England in this past war was a fine example of this.

If, however, a nation is preparing to upset the league and wage war against it without the assistance of trade with other nations, the policy of industrial completeness, perhaps through a protective tariff, is clearly to be recommended. In fact, if I, a lover of peace, were advising such a nation, I should advise them to adopt the protective tariff rather than the bounty method, and they would, therefore, enter the contest in a weakened condition because of their relative poverty.

(c) *The Raising of Wages.* The idea that the protective tariff raises wages is a widespread belief of the personal, local mind, and doubtless one of the great menaces to world peace. It is a matter of record that wages in protected industries in the United States are often much lower than in others that are unprotected. Therefore, the wage argument must presumably be that wages in general will rise through protection. From the theoretic standpoint, to the person who will think nationally for a few minutes, it must seem plain that the nation producing the greatest amount of wealth day by day can pay the highest wages. It seems equally plain that if a protective tariff makes us grow bananas at home in greenhouses, we will have less for our labor than if we imported our bananas from Guatemala where they grow under the warm sun, and paid for them with wheat, corn and pork that we grow out of doors under such sun as we possess, and with machinery from our good factories. It is difficult to find anyone who objects to the above reasoning with regard to the banana. It is merely a strong case, of which every industry that cannot compete with foreign countries is merely another case in principle, although rarely in degree.

So much for the theoretic side of the relation of wages to tariff. Millions of men in America will point to the perfectly correct fact that we have in the United States a protective tariff and high wages. Therefore, says the local-minded man, the protective tariff has produced the high wages. Such men should send a commission to Portugal, a country which has a higher and more general tariff than the United States, and where men get fifty cents a day, American gold, and pay double our prices for bread, meat, clothes and machinery, and as a consequence a large proportion of the people live on cold corn bread and boiled cabbage, with rarely a taste of meat, and go half naked.

The great factor setting the wages of any country is the opportunity for production in that country—natural resources. In normal times it is true that free-trade England has slightly lower wages than protectionist America, but the cause of this difference is to be sought, not in tariff policy, but in natural opportunities per man in the two countries. In the United States we have about thirty people per square mile. England has six hundred. In this country we bore a hole in the ground and petroleum spurts out of it. England must import her oil. We go out into vast expanses of forest, produced by nature, cut down the most wonderful saw-logs to be found anywhere in the world. England had used up her forests in Shakespeare's time. We have the chief cotton fields of the world. England must import her cotton. We produce three-fourths of the world's copper. England must import her copper. We dig horizontal burrows into Pennsylvania hillsides and bring out hundreds of millions of tons of the best coal. England must dig deeper for poorer coal. We have vast wheat fields and the king of grains, corn, and a billion bushels of oats per year and the greatest herds of swine. England must import from us pork, oats, wheat, corn. Is it any wonder that her wages are a little lower? If she hedged herself around with a high tariff, she would be as hungry as Portugal. Instead, having a lower price level because of this free import of nearly everything, there is surprisingly little difference in real wages in England and America.

It is undoubtedly true that the transfer suddenly, or even gradually, to a free trade basis, would cause the decline and even disappearance of some industries in all tariff countries, including

the United States. This must always be an appalling thought to people engaged in those industries. Perhaps, with their special privilege, they should take the position of the drafted soldier who sacrifices for the public good. Perhaps people in such glass-house industries have a right to some reimbursement through their transfer to other industries by the coming of free trade. If so, it would be much better for us to contribute through taxes to a fund of billions for this purpose than to contribute our equal fund of billions, as we do every year in the United States, to the continuance of the impoverishing, war-breeding protective tariff.

The Chinese and Japanese are certainly not contented with their present exclusion from the United States. They are certainly not contented with tariffs that prevent them from getting the profits of trading with us. Certainly they will be better satisfied and the danger of war will be reduced if they can at least freely get the produce of the forbidden lands. In the end imports and exports balance. Let the Pacific ships take to their treeless plains the cargoes of lumber from our Western mountains, and of cotton from our Southern fields, and of machines from our Eastern factories. It will mean prosperity and wages in the lumber camps and the young forests, in the Southern cotton district, the Eastern mill town. And when in return the so-called "pauper" goods come back, let us remember that goods are good. They are the object of trade.

Most of our business men seem to ignore the well-known fact that our greatest trade is with manufacturing nations. England and Germany, the two nations with the most developed manufactures, had an enormous trade with each other before the war, and they were respectively our best market and our second best market. Together they took \$939,000,000 worth of produce, nearly half of our total export, while China still undeveloped, with twice as many people as England and Germany combined, took \$24,000,000 worth of goods from us. It is difficult to imagine how greatly our exports to China would jump if we could make the Chinese a manufacturing nation, raising their standards of living, their purchasing power, reducing their hours, persuading them to eat a great variety of food, use more soap, wear modern clothes, carry Ingersoll watches, listen to the phonograph, talk on the telephone, sleep in metal beds, get up in the morning by alarm clocks, and

run about in automobiles, meanwhile joining the Union and improving shop conditions.

While I have used the Chinese and Japanese as examples, because they are the most extreme, we have at the present moment a widespread demand for the checking of immigration from all countries, which means of course that we make half the world yearn to come to us and to resent this monopoly of American opportunity for the Americans. They, too, need to be mollified with American goods, if they cannot have American homes. Fortunately free trade with them will be profitable. Even if it were unprofitable, it would still be a duty just as we think a navy is a duty. It is indeed fortunate that so great a duty is also an avenue of profit rather than of loss.

3. THE PREFERENTIAL TARIFF. This is but another kind of protective tariff. For example, England and Canada make themselves into one tariff unit rather than two. There is no essential difference between these two kinds of tariff in their economic and political aspects. It is merely one of degree. It is not likely that this Canadian tariff would ever have been made but for the fearful injuries that have come to Canadian industry through the sudden shutting off of the American market by some of our tariff laws.

4. MAXIMUM AND MINIMUM TARIFFS. This device is merely one more detail in the general effort to get particular advantage through tariff legislation. It has no fundamental principle different from other tariffs, and, therefore, merits no particular discussion.

5. ANTI-DUMPING TARIFFS. One kind of tariff needs to remain, even in a free trade world with a League of Peace—the anti-dumping tariff. This is merely the international extension of a policy that has been already adopted in some of the American states. The evils to be remedied by such a law are of two kinds:

(a) *Demoralization of Trade.* A company like some huge American enterprise might supply the local market with plows, selling for twelve dollars each and costing six dollars. Some season it has a thousand plows left over. They cannot be sold in the home market without reducing the price to nine dollars and demoralizing the price. They could be sold in Portugal for nine dollars, with two dollars profit, and the sellers would have their

old markets undisturbed, but the Portuguese plow manufacturers would have a very dull season, and perhaps close their plants and throw people out of work. Therefore, some nations, especially Canada, probably because of her nearness to the United States, have made anti-dumping laws, which require that produce shall not be sold in Canada for less than the same produce sells in the home country. This is needed and it can scarcely be considered as a provoker of war.

(b) The second evil that such an anti-dumping law, properly enforced, would remedy, would be attempts to kill a young industry in a new country, as for example, German dye plants destroying the market of a new rival in some other country by selling dyes at less than cost until the rival gave it up. This is the old, and well-tried method by which the trusts have risen inside of many countries.

E. THE MOST FAVORED NATION CLAUSE

Many treaties contain a clause providing that the country making the treaty shall have the same advantages in trading with country B as country B shall at any time extend to country C, or any other country. In other words, the first country shall be treated under the same conditions as the most favored nation.

If there is free trade, the whole, most-favored-nation business, so far as trade is concerned, seems automatically to go by the board. It should go.

In conclusion it may be pointed out that an effective League of Nations offers three ways of greatly increasing the trade and wealth of the world:

First, by controlling and insuring international investments so that they may increase and become the basis of industry rather than the basis of dispute or parts of great military schemes.

Second, by the reduction of armaments and military service, men will be left free for education and industry.

Third, by removing the fear of war and the necessity of private industrial preparation for it, a successful league opens the way for the gradual adoption of free trade, which is alike a promoter of peace and a promoter of wealth.

Economic Factors in the Maintenance of Peace

By O. M. W. SPRAGUE

Professor of Banking and Finance, Harvard University

THE immediate object of the war has been fully attained. The danger to liberty and democracy from the attack of the Central Powers has been effectually overcome. It is now our task to establish conditions which, so far as may be humanly possible, will remove the danger of future conflicts between the nations. Territorial changes on the basis of independent nationalities will remove grievances which might endanger the future peace of the world. The establishment of democratic governments throughout Europe and the discontinuance of secret diplomacy will do much to eliminate causes of trouble which spring from personal ambition, and flourish in an atmosphere of intrigue.

These political changes are necessary if a peaceful world is to be established, but very much more is required to accomplish the end in view. Economic causes of international strife would remain, and these causes may well prove an even more serious menace to the peace of the world than they have been at any previous period in the history of civilized peoples. At least four influences will be present tending to embitter international economic relations. These influences, arranged in the order of increasing importance, are: (1) the intensification of national sentiment which is the invariable consequence of war; (2) the increasing size of the business organizations conducting foreign trade, transportation and finance; (3) the urgent needs of many countries during the years immediately following the war; and (4) and by far the most important, the technical requirements of modern warfare, which involve the use of the products of a great variety of highly developed industries.

ECONOMIC CAUSES OF INTERNATIONAL STRIFE

The intensification of national sentiment resulting from war creates an atmosphere in which extreme measures of a nationalistic character find ready acceptance. This sentiment tends to neutralize the effects of peaceful impulses which experience with

the burden and follies of war naturally tends to strengthen. With the lapse of time, the attitude of extreme nationalism will become tempered and subdued, but in the immediate future it will give a semblance of merit to extreme national aims.

Tendencies of this sort will be strengthened as a result of the increase in the size of the business trading unit. Military exigencies have greatly enlarged the range of governmental economic activities and have also tended, in many branches of industry, to a high degree of concentration in organization and in management. After the return of peace, most of the foreign trade of each country seems likely to be conducted by a very small number of very large business organizations, which will combine transportation and finance with production and marketing. It is even possible that governmental agencies may be employed in some instances, and doubtless there will be an increase in governmental supervision. Foreign trade will, in these circumstances, take on much more of the character of a national activity than when conducted by numerous individuals and companies. Unrestrained and unfair competition, which formerly merely occasioned bitterness between individuals of different nationalities, is likely to occasion friction between countries.

A bitter struggle for foreign business during the next few years is anticipated by many. If such a struggle develops, and if it is reinforced by governmental assistance in the form of shipping subsidies and the control of mineral resources for commercial bargaining purposes, good relations between countries will be subjected to most severe strain, and especially the danger of international discord over economic matters will be particularly great during the years of reconstruction following the war on account of the urgent rehabilitation requirements of many countries. These needs must be satisfied in an equitable fashion if serious discord is to be avoided. The scanty supplies of essential raw materials must be distributed fairly and at reasonable prices. The world's stock of gold, if handled graspingly, will be an inadequate support for the huge credit structure which has been reared upon it during the course of the war. The United States has acquired an inordinately large share of this gold, much of it coming from our associates in the war before we became a belligerent. It should be regarded as a trust fund, to be used in such a fashion as will best

serve to support the credit structure, not only in this country, but throughout the world. To attempt to acquire by its means a dominating position in the money markets of the world is perhaps an attractive policy from a purely national point of view. If we are honestly desirous of maintaining peaceful and friendly relations with other countries, such a policy should not be given a moment's consideration.

DANGERS OF FRICTION OVER SHIPPING AND COMMERCE

Among all of the various matters which may occasion friction during the next few years, those arising out of the shipping situation seem likely to prove the most serious and the most difficult to handle in an equitable fashion. As a direct consequence of the war, a revolutionary change has taken place in the tonnage of ships under the flags of the different maritime nations. Japan and the United States have greatly increased their tonnage. France and Scandinavian countries will have a much smaller number of ships, while the tonnage of Great Britain will also show a marked decline. The present deficiency in shipping may in the course of a few years be followed by an equally marked excess. In either situation, most serious difficulties will be encountered if shipping policies are determined primarily with reference to selfish national aims. In ocean transportation, equality in service and rates accorded the shippers of different countries, similar to that in domestic railroad transportation, is wise economic policy. Foreign commerce, stimulated by special rates, does not rest upon a solid foundation.

The United States, during the years immediately following the war, is threatened with no diminution in the opportunities for expansion of its industry. This is due in part to our late entrance into the war, but even more to the wide range of essential materials which we produce. The needs of our associates in the war, together with those of neutral, and also of enemy countries, will furnish opportunities for aggrandizement on our part, if we should press the advantages of our position to the utmost. To do so, would certainly give rise to deep-seated distrust and hostility and they would be deserved. The fundamental objects of our participation in the war were not national objects. The needs for supplies of our associates upon the return of peace, are of a pressing

nature, analogous to those which gave rise to the common law of obligation imposed upon those engaged in rendering public service, to serve all at reasonable rates. The same policy should mark the period of rehabilitation in the economic arrangements between different countries, and especially, owing to the strength of its position, the policy of the United States. We should make it perfectly clear that government assistance will not be extended to further endeavors to acquire, at the expense of our Allies during the years immediately following the war, a dominating position in lines of business in which we did not hold such a position in the past. In the long run, a policy of this sort will be conducive to the development of the country in the most desirable and profitable direction. Economic activities, stimulated by the temporary predicament of our associates and even of enemy countries, cannot be expected to manifest a capacity for large and continued expansion.

Although there will be no exact return to pre-war conditions, there is little evidence in support of the view that the war will occasion revolutionary changes in the ability of different countries to compete successfully in foreign markets. The effects of the war on foreign trade may be great at first, but in the course of time deep-seated permanent influences will shape the course of our foreign business. Markets acquired during the abnormal years following the war will rest upon a weak foundation unless it is clear that they are markets which would presumably have soon been developed had the world remained at peace.

Up to this point international economic relations have been considered exclusively as purely economic questions. This has been done designedly in order to emphasize the view that when judged as purely business questions, there is no fundamental divergence of economic interest between the nations. To find instances of irreconcilable conflicts of economic interests between nations, it is necessary to go back to the pastoral stage of social development. In that stage of society, the number of people who can live within a given area is strictly limited. This is not the situation of civilized peoples. Thanks to improvements in the arts, especially in transportation, the limits upon the population of any given area are highly elastic. The economic advantages which a country can gain by the adoption of policies unfavorable

to other countries is slight, even when the estimate is based upon faulty economic conceptions, such as those which lead to exaggerated notions of the importance of foreign as contrasted with domestic trade.

THE INFLUENCE OF MILITARY FACTORS

In the modern world, economic causes of international strife have seldom been independent causes. They have been associated with, and in large measure, an inevitable consequence of, the necessity which has obliged all countries to safeguard themselves against the contingency of war. The controversy between Germany and Great Britain regarding Mesopotamia is a familiar example. Great Britain did not oppose German economic activities in that region primarily, if at all, upon economic grounds. Under German control the trade of Great Britain in that part of the world would have been far greater in 1912 than in fact it was. Economic penetration by Germany was opposed, and rightly, because Germany would have gained a valuable strategic position from which to attempt the invasion of Egypt and India in the event of war.

Military considerations are certain to shape economic national policies to a far greater extent in the future than in the past, if nations must continue to guard themselves against war. In order to conduct modern warfare with any hope of success, a country requires abundant resources in raw materials, and must utilize the products of a great variety of highly developed industries. All nations have become fully, and one may even say, nervously, aware of the vital importance of the economic factor in war. Equitable international arrangements regarding shipping, colonies, mineral resources, and other economic matters, can be devised without much difficulty, if they are handled as purely economic business questions. Once military considerations are introduced, endless difficulties are encountered.

Considered purely as an economic question, the interdependence of nations is highly advantageous. Given assurance of permanent peace, the world would then be free to make the most effective use of its resources, labor and business organization. Measures, such as protective tariffs, designed to stimulate the industrial development of the different countries would still be adopted, but the advisability of those measures would be determined solely with

reference to economic and social considerations. Under the threatening shadow of war, each nation must endeavor to be self-sufficing, with an inevitable loss in productiveness of industry in consequence. The general adoption of preferential colonial tariff policies for example is altogether probable if wars in the future are to be anticipated. Colonial preference is a policy which is bound to excite envy and hostility, since colonies are most unequally divided among the nations. If this were a matter which might be determined solely on grounds of economic advantage, the area subject to preferential arrangements would probably not be enlarged, and it is not unreasonable to anticipate that the "open door" policy would be more generally adopted.

VITAL NEED FOR A LEAGUE OF NATIONS

Adequate preparation for war in the economic sphere breeds occasions for war. A peaceful world will never be secured as a result of agreements regarding a succession of particular economic matters which are occasioning hostility between nations. There must be convincing assurance that further wars are altogether unlikely. This assurance can only be given by the formation of a League of Nations which shall absolutely exclude the resort to war as a means of settlement of international disputes. Whether such a league should provide other means of settlement is a matter of secondary importance. The fundamental object would be gained if nations were left entirely free to resort to any and every other means of settlement, war alone excepted.

Whether there is to be a League of Nations or not, is the basic factor in the determination of all other questions which will come before the Peace Conference. If a league is not established, we must continue to assume that the world is to be organized for war and not for peace. Strategic advantages in the delimitation of territorial boundaries will then be a vital matter, as well as the possession of natural resources such as coal and iron.

Consider, to take a single instance, the situation with reference to coal and iron. After the restoration of Alsace and Lorraine to France, if the world is to be a peaceful place in the future, this change in boundaries will not make necessary a serious change in German industry. Iron will be exported to the coal producing regions of Germany just as it is exported from Sweden and Spain to Great Britain. It would be an economic loss not only to the

owners of the iron mines but also to France to retain all the iron for French use. On economic grounds, it would be no more sensible than an attempt to retain all cotton produced in the United States for our own cotton industry.

On the other hand, if the world is to be an armed camp, it will be wise policy for France to place obstructions in the way of the movement of iron into Germany. This policy Germany would naturally endeavor to counter by obstructing the movement of coal into France. Each country would be concerned to secure a more considerable iron and steel industry than the other, not upon economic grounds but for purely military reasons. Here is a situation which contains the material for endless bargaining and friction.

Most great changes come about as a result of a slow process of growth. Some few changes must apparently be made in their entirety or nearly so at the outset, if they are to be made at all. The League of Nations evidently belongs to this class. In this respect it is analogous to the federal reserve banking system. The reserve banks, operating with and through the other banks, could not have performed their functions if when they were opened they had had relations with only a small fraction of the banks of the country. Relations with all banks were not needed, but with a preponderating number of them. Similarly with a League of Nations to establish peace; it need not include every nation, but it can hardly begin with a scattering few. Unless there is a solid basis for confidence in the League, its power to eliminate war will not be sufficiently certain to render unnecessary the adoption by the several nations of policies designed to safeguard them against the outbreak of war, policies which in turn are the occasion of war.

The promise of the elimination of war by the formation of a League of Peace would be small if the economic interests of nations were fundamentally antagonistic. Happily, conditions of life upon the earth do not compel so dismal a view of the future. On the contrary, the gain to all nations from the elimination of war is large and positive. Relief from the burdensome cost of constant military preparation, and from the huge cost of occasional wars, would be well worth the sacrifice of much in economic advantage and opportunity. No such sacrifice is, however, involved. It is only through the establishment of the world upon a peaceful basis that full and effective use of the natural resources of the world can be made.

Economic Foundations of the League of Nations

By FREDERIC C. HOWE

Commissioner of Immigration, New York City

THE economic collapse which has come to Russia, Austria-Hungry, Germany, Belgium, and in only lesser degree to England, France, Italy and the neutral countries of Europe, is forcing on the attention of the peace conferees in Paris the extent to which the world has been internationalized during the last half-century, and the necessity for a new kind of peace if the world is speedily to come to life again. We are accustomed to think of international questions in exclusively political and territorial terms. This is one of the heritages of the dynastic and military order, which puts emphasis upon enlarged boundaries, a big population, and the other emblems of the purely political state. Such have been the political concepts for hundreds of years, and it is not surprising that the representatives of all the powers at the Peace Conference should have brought to their task traditions of a peace based upon political and territorial adjustments.

Fifty years ago nations were largely self-sufficient. They produced for their own consumption. Iron, steel, copper, rubber, cotton, wool, silks and the products of the tropics had not entered into the lives of all peoples as they have at the present time. The twenty years which preceded the war was a period of colossal international expansion and in 1914 the foreign trade of the world exceeded \$40,000,000,000. Of this, one-fourth was in the hands of Great Britain and Germany. Surplus wealth had ventured out from creditor countries, especially England, France, Germany and Holland, in search of trade and commerce, for the development of resources in backward countries, the building of railroads, and the making of loans in backward states. Upwards of \$40,000,000,000 had been so invested by the great creditor nations of the world.

These are but suggestive of the extent to which the world was interlaced by economic connections. Branch banks radiated from London, Paris and Berlin. The ports of Great Britain, as well as Hamburg, Bremen, Antwerp and Rotterdam, were *entrepôts* for the wealth of all the world. Explorers were followed by traders

all over the Orient, South America, to the fastnesses of Africa. The overseas wealth of the powers of Europe was equal to a sum almost as great as the combined domestic wealth of England and France.

The war shattered this colossal structure of finance and banking, of trade and commerce, of exploitation. The internationalism of the world which had involved hundreds of years in its building suddenly came to an end. The central powers and Russia were under a blockade. England, France, Italy and Belgium were subjected to a similar embargo by the shortage of ships. The transportation agencies of the world were commandeered for the war. When the armistice was signed the old economic order was in a state of collapse. Germany had no raw materials. England was short of a thousand things and France was in the same condition. The Russian peasants, cut off from industrial supplies such as agricultural implements, tools, clothes, shoes and other supplies, were unable to sell their wheat, which accumulated in vast quantities outside of the industrial centers, which were starving because of their inability to carry on exchange with the food producers on the one hand and the outside world on the other. Italy has no iron ore, no copper, no coal. She has to rely upon some one of the greater powers for her elemental commodities, upon which her industrial life depends.

The great task of the world, and of the Peace Conference as well, lies in putting the world to work again. And this can only be done by establishing the internationalism which the war destroyed. This the powerful classes within the various powers are unwilling or unable to do. They are seeking all kinds of privileges, especially protective tariffs, to protect their war-made industries and enable them to monopolize their home trade. This is true of France, Italy and Great Britain. There is some short-sighted justification for this attitude, for all of the European countries have been stripped of their gold reserve. They are on a paper basis. If they buy largely from foreign countries, they can only pay in gold or credits. So they feel they must produce for their home market, and export as much as possible to foreign markets. But such export will be limited and possibly blocked altogether if these protectionist policies are carried out. Germany cannot pay her indemnity; she cannot pay for the raw materials which she

must have unless she is permitted to exchange her factory products for these commodities. The same is true of all of the other countries.

An international economic council in continuous session is one of the first needs of peace. It should have power to organize information and familiarize the world with the needs of the world. For a time at least it should have some powers over shipping and raw materials. Only in this way will it be possible for the limited cargo space to meet the more urgent needs of the various countries, and by the establishment of priorities prevent shipping and transportation agencies from being used for secondary purposes.

A similar financial organization should be created under the control of governmental agencies. It should be a banking, trading and exploiting concern with powers to place loans where most needed. It should also have power to develop resources and promote trade with backward countries.

But these are at most only temporary expedients to tide over an immediate emergency. If we would have a secure peace, if we would banish the fear which is one of the causes of war, the world must be freed from the idea of exclusive, self-contained nationalism which has led to annexations, protectorates, spheres of influence and the closed door, as well as the erection of fortresses on strategic places on the seas. The nations which control iron ore, coal, copper and oil control in large measure the economic life of the rest of the world. And this is a power which no nation or group of nations should enjoy. Germany aimed to lay her hands on the iron ore and coal of France and Belgium. This would have given her command of almost all of the iron ore and coal on the continent of Europe. It would have made France, Italy and central Europe subject to her. Great Britain through her command of the Mediterranean commands the trade to the Far East and the resources of Africa.

An economic peace paralleling the principles laid down by President Wilson should free the world as far as possible from the exclusive control by any nation of the international connections and necessities of the rest of the world. Provision should be made for:

1. The ending of all spheres of influence, the closed door and exclusive privileges in backward countries such as Africa, Asia and the Far East. These countries should be free to trade on equal terms with all the world. Their raw materials should be

offered to all without discrimination; while their ports and harbors should be placed under international guardianship to prevent discriminating port and harbor dues.

2. The strategic water-ways of the world should be policed by the world and open to all on equal terms. Such water-ways include the Mediterranean, the Black Sea, the Persian Gulf, the Baltic, the Kiel Canal, Suez Canal and Panama Canal. Commanding fortresses like Gibraltar and Constantinople should be internationalized and used as an agency of the League of Nations to enforce its decrees.

3. The right of exploitation of weak and backward nations should be placed under international control as a means of protecting native peoples from extortion and monopoly control, as well as for opening up their resources on fair and equitable terms to all the world.

4. Possibly the greatest need of all is free trade: such free trade as will enable countries like Italy and France to develop their own cultural and industrial life along natural lines. These nations should not be driven into unnatural channels by military and industrial necessities. Possibly international free trade is out of the question for the present. But an international economic conference in constant touch with the economic conditions and possibilities of the world might do much towards the promotion of more intelligent tariff schedules, and ultimately, as peace becomes more secure, lead to the development of freer trade relations between nations.

5. Such a program is admittedly difficult. There are too many powerful interests in all of the countries which seek to protect themselves by exclusive and monopoly rights. But the alternative may be industrial bankruptcy. It may be the rapid spread of Bolshevism and revolution because of the inability of nations to set their millions at work again. For revolutions are born of hunger and destitution. And Europe is in such a state of collapse that it cannot wait for an indefinite time for statesmen to debate these questions. Nor is it safe to go back to the old philosophy of imperialism that preceded the war and was largely responsible for its outbreak. For if the war has demonstrated anything it is that subject nations will not remain subject, and that the expanding industrial world will not permit its expansion to be constricted as it has been in the past.

REPORT OF THE BOARD OF DIRECTORS, YEAR END- ING DECEMBER 31, 1918, AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE

I. REVIEW OF THE ACADEMY'S ACTIVITIES

The entry of the United States into the great war, far from limiting the Academy's activities, served to emphasize the importance of the national mission which the Academy is called upon to perform. It is a matter of common knowledge that when we entered the war the country was unprepared from a military standpoint. It is also true that the country was intellectually unprepared to cope with the great international issues raised by the war. The year that has elapsed has witnessed a marked advance in the enlightenment of public opinion, but it is evident that the part that this country will be called upon to play, not only in the final settlement, but in the future problems of world readjustment, will demand of the American people a deeper interest and clearer insight into international problems.

Furthermore, the great democratic purposes for the attainment of which the United States entered the war carry with them implications in our domestic policy which we cannot afford to ignore. Now as never before must the United States demonstrate to the world that democracy is not merely a form of government but that it carries with it the obligation to develop an industrial and social system truly democratic both in structure and operation. We are facing a period in which domestic problems of far reaching importance must be solved, and they can only be solved through a fuller appreciation on the part of the people of this country of the larger and deeper significance of a democratic régime.

It was with a view to enabling the Academy to contribute its due share to this great purpose that the publications and conferences during the past year have been arranged. Your board feels that the members of the Academy may look back upon the activities of 1918 with very real satisfaction.

We are all particularly indebted to Dr. Clyde L. King for the high standard that has been maintained in the Academy's publications. With each year, to an increasing extent, the Academy

publications serve in giving to our members as well as to the general public, the material upon which to form a judgment on the great national problems confronting the country. Such a service is of special importance in a great democracy such as ours where in the last analysis public policy must be guided by public opinion. Your board desires to take this opportunity to express a deep sense of obligation to the chairman and to each member of the editorial council for the devoted service that they have given to the Academy. A large group of specialists under the direction of Dr. King have patriotically given of their time and energy with no thought other than service to their country and with no compensation other than the satisfaction of a public duty well performed.

Your board again desires to call attention to the pressing need of an endowment fund which will enable the Academy to conduct special investigations on a much larger scale than has heretofore been possible and will also enable us to secure the Academy building of which we stand in such great need.

II. PUBLICATIONS

During the year 1918 the Academy published the following:

- Financing the War (January)
- War Adjustments in Railroad Regulation (March)
- Social Work with Families (May)
- Procedure in State Legislatures (May Supplement)
- Mobilizing America's Resources for the War (July)
- War Relief Work (September)
- Rehabilitation of the Wounded (November)

III. MEETINGS

During the year 1918 the Academy held the following meetings:

- January 26—Rehabilitation of the Wounded
- April 26 and 27 (22nd Annual Meeting)—“Mobilizing America's Resources for the War”
- September 20 and 21—Rehabilitation of the Wounded
- December 21—The Industrial and Financial Outlook

IV. MEMBERSHIP

The membership of the Academy on the 31st of December, 1918, was 6,579 with a subscription list of 1,135. Of the 6,579 members, 6,325 were residents of the United States and 254 for-

eign. Of the 1,135 subscribers, 1,023 were in the United States and 112 foreign. Compared with the membership on the 31st of December, 1917, we find a gain of 312 in the United States and 4 foreign, or a total of 316. In the subscription list, there is a gain of 73 in the United States, and 10 in the foreign, or a total gain of 83. The total gain during the year 1918 in the combined membership and subscription lists is 399. During the year the Academy has lost through death 68 of its members, three of whom were life members.

Foreign

Albert Ballin

Senor Don Marcial Martinez

*Frederick William Frankland

Philadelphia

Walter L. Bacon

Harry Gross

Charles O. Baird

Henry Justice

W. H. Barnes

W. J. McCahan

Hon. Rudolph Blankenburg

Hon. Stephen Leslie Mestrezat

Horace Brock

James Pollock

*T. Wistar Brown

Hon. William P. Potter

William Burnham

Joseph P. Remington

Harris J. Chilton

Jay B. Roesnheim

Mrs. Everett U. Crosby

E. B. Smith

Dr. Samuel G. Dixon

George W. Stoker

Harry C. Francis

J. S. Wentz

A. T. Freeman

Outside

Dr. Edward T. Abrams

Richard T. Green

Charles Frederick Adams

Rev. J. Francis Gregory

Nathan W. Blanchard

Frederick Gross

Charles E. Burbank

N. F. Hawley

J. J. Burleigh

Rowland G. Hazard

R. J. Camp

William Herbert

Rev. Emanuel C. Charlton

W. A. Hunton

G. W. Creighton

Hon. Grenville M. Ingalsbe

A. C. Einstein

G. B. Jennings

Hon. C. W. Fairbanks

J. G. Battelle

Mrs. Lucretia R. Garfield

Mrs. Mary Morton Kehew

* Life member.

Jacob H. Krout	*Colonel R. B. Bicketts
George V. Leverett	Charles Scott
Arthur F. Luke	Joseph A. Sinn
C. G. Macey	George C. Smith
Dr. I. W. Marsteller	Charles B. Scutter
Hon. Francis G. Newlands	Hon. William H. Stead
Benjamin Nields	W. D. Straight
R. M. Olyphant	W. H. Swift
John Howe Peyton	T. T. Watson
Richard H. Reeve	F. W. Whitridge

The death of these members has deprived the Academy of some very warm friends and enthusiastic workers.

During the year the Academy has lost by resignation 402 of its members and 41 subscribers, while 786 members and 124 subscribers have been added to the list.

In addition to the resignations and deaths, there are being held for two years to June 30, 1918, 99 members; to December 31, 1917, 43; and to December 31, 1918, 94.

V. FINANCIAL CONDITION

The receipts and expenditures of the Academy for the fiscal year just ended are clearly set forth in the treasurer's report. The accounts were submitted to Messrs. E. P. Moxey & Co. for audit, and copy of their statement is appended herewith.

In order to lighten the burden of expense incident to the Annual Meeting, a fund of \$843 was raised. For the September conference on "The Rehabilitation of the Wounded," the sum of \$50 was contributed. The Board desires to take this opportunity to express its gratitude to the contributors to these funds.

VI. CONCLUSION

One of the problems confronting your board is to develop closer personal relations between the members of the Academy so that each member will feel a sense of responsibility for the extension of the Academy's influence in the community in which he or she lives. With each year the enlarging possibilities of the Academy become more apparent and it is only through the personal interest of our

* Life member.

members that these possibilities can be realized. In no other way will the Academy be able to fully realize the possibilities of its usefulness.

January 18, 1919.

CHARLES J. RHOADS, ESQ., TREAS.,

*American Academy of Political and Social Science,
Philadelphia, Pa.*

Dear Sir: We herewith report that we have audited the books and accounts of the *American Academy of Political and Social Science* for its fiscal year ended *December 31, 1918*.

We have prepared and submit herewith statement of receipts and disbursements during the above indicated period, together with statement of assets as at December 31, 1918.

The receipts from all sources were verified by a comparison of the entries for same appearing in the Treasurer's cash book with the record of bank deposits and were found to be in accord therewith.

The disbursements, as shown by the cash book, were supported by proper vouchers. These vouchers were in the form of cancelled paid checks or receipts for moneys expended. These were examined by us and verified the correctness of the payments made.

The investment securities listed in the statement of assets were examined by us and were found to be correct and in accord with the books.

As the result of our audit and examination we certify that the statements submitted herewith are true and correct.

Yours respectfully,

EDWARD P. MOXEY & Co.,
Certified Public Accountants.

Balance Cash on Hand January 1, 1918.....		\$2,750.50
<i>Receipts</i>		
Members' Dues.....	\$25,073.53	
Life Membership.....	100.00	
Special Donations.....	1,068.00	
Subscriptions:		
Individuals.....	\$508.74	
Agents.....	3,363.47	
Libraries.....	440.33	
	<hr/>	4,361.56
Sales of Publications.....	4,380.68	
Interest on Investments.....	5,039.50	
Sundries.....	.75	39,965.54
	<hr/>	<hr/>
		\$43,716.43

Disbursements

Office Expense:

Office Salaries.....	\$2,997.74	
Special Clerk Service.....	10.25	
Supplies and Repairs.....	707.11	
Stationery and Printing.....	37.91	
Telephone and Telegraph.....	56.25	
Postage.....	224.71	
Freight, Express and Carfare.....	14.11	
General Expense.....	1,186.80	\$5,234.88

Philadelphia Meetings:

Salaries.....	\$1,106.06	
Hall Rents.....	600.00	
Stationery, Engraving and Printing.....	1,186.56	
Expenses of Speakers.....	348.78	
Postage.....	357.21	
Telephone and Telegraph.....	33.66	
Carfare, Newspapers, etc.....	117.14	3,740.41

Publicity Expense:

Salaries.....	\$1,124.18	
Pamphlets, Cards, etc.....	109.45	
Postage.....	1,221.16	
Stationery, Supplies and Repairs.....	1,055.99	
Telephone.....	2.65	
Freight, Express and Carfare.....	.85	3,514.28

Publication of *Annals*

Salaries.....	\$2,823.55	
Printing.....	9,535.98	
Reprints.....	484.96	
Binding.....	611.52	
Postage.....	1,344.24	
Advertising.....	256.91	
Stationery and Supplies.....	551.27	
Freight, Express, Carfare and Sundries.....	400.62	
Telephone and Telegraph.....	154.32	
Storage and Insurance.....	13.96	16,177.33

Membership:

Salaries.....	\$1,829.50	
Stationery and Supplies.....	276.71	
Postage.....	320.16	
Sundries.....	37.41	2,463.78

Investments Purchased..... 5,000.00

Interest, Premiums and Commissions..... 9.25 \$36,148.93

Balance December 31, 1918..... \$7,567.50

REPORT OF THE BOARD OF DIRECTORS

323

ASSETS

Investments (book value)..... \$105,505.77

Cash:

In Academy Office..... \$300.00

In Treasurer's Hands:

Centennial National Bank..... 900.00

Girard Trust Company..... 7,087.50 \$7,987.50

\$113,073.27

LIABILITIES

None

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